

1ST TANJUNGPURA INTERNATIONAL CONFERENCE ON
MANAGEMENT, ECONOMICS AND ACCOUNTING

***“SHAPING FUTURE BUSINESS AND ECONOMICS
THROUGH RESILIENCE TOWARD CRISIS”***



**Faculty of Economics and Business
Universitas Tanjungpura**



CONFERENCE PROCEEDING
**1ST TANJUNGPURA INTERNATIONAL CONFERENCE ON
MANAGEMENT, ECONOMICS AND ACCOUNTING**

“Shaping Future Business and Economics Through Resilience toward Crisis”



Faculty of Economics and Business
Universitas Tanjungpura

Conference Proceeding

1ST TANJUNGPURA INTERNATIONAL CONFERENCE ON MANAGEMENT, ECONOMICS AND ACCOUNTING

“Shaping Future Business and Economics Through Resilience toward Crisis”

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**WELCOMING REMARKS
DEAN OF FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITAS TANJUNGPURA**

Assalamu'alaikum Wr. Wb

The Honorable Dean of the Faculty of Economics and Business, Tanjungpura University

Respected Speakers for today's International Conference of TICMEA and distinguished participants for International conference and Call for paper of the 1st TICMEA

Welcome to 1st TICMEA International Conference and Call for Papers

Allow me to begin by congratulating the Faculty of Economics and Business at Universitas Tanjungpura on becoming the Host of this distinguished event, which brings together universities throughout Indonesia.

The COVID-19 pandemic has brought up a great deal of uncertainty for the economy and business sector, especially in terms of resilience. Since the breakout, questions have arisen, including whether the future of economics will change due to the fact that the globe is now confronting a new normal with the lifting of university mobility and cooperation.

Concerns also exist over challenges in economic activities following the pandemic, as economic activity in various parts of the world face uncertainty as a result of the scenario. The COVID-19 pandemic places unprecedented pressure on economic and broader development concerns. Due to job losses, decreased income, and lack of access to social security, millions will be forced back into extreme poverty, which will have implications for the preservation of inequality. There is a high possibility that the pandemic may impede the Asia-Pacific region's progress toward the 2030 Agenda for Sustainable Development and render it more vulnerable to future shocks. To avoid the disastrous repercussions of such shocks in the future, policymakers need innovative ideas and strategies to improve the resilience of economies, i.e., their ability to absorb shocks, adapt to change, and prevent systemic collapses. They should "move forward" toward economies that are more robust, inclusive, and sustainable.

Each university has its unique competitive advantages and strengths. However, everyone has their weaknesses. Universities will continue to fall behind if they do not communicate and exchange resources about mobility and opportunity. Possibilities for resource exchange have existed for eons; therefore, academic platforms like as TICMEA are more crucial than ever to facilitate resource sharing and opportunities.

We hope that this event will be beneficial to the organization's members in terms of gaining insight and reaching consensus on how universities should respond to this situation in terms of research, competitive advantage, resource sharing, and entrepreneurship, as well as providing a forum for participants to share their ideas and research.

Thank you,

Wassalamu'alaikum Wr. Wb

Pontianak, August 29th 2022
Dr. Barkah, SE. M.Si

WELCOMING REMARKS

CHAIR OF 1ST TANJUNGPURA INTERNATIONAL CONFERENCE ON MANAGEMENT, ECONOMICS, AND BUSINESS

International conferences have been held in Faculty of Economics and Business, Universitas Tanjungpura frequently. However, several of these international conferences are associated with, affiliated with, or integrated with other organizations or Universities.

For the Faculty of Economics and Business, the inaugural TICMEA International Conference is the first step toward a long-lasting International Conference.

“Shaping Future Business and Economics Through Resilience toward Crisis”

The topic for this year was selected in the anticipation that the research from participants will influence upcoming corporate and economic crisis management plans.

We appreciate the 122 participants who have submitted papers for the yearly meeting. We're hoping to get together in person in the upcoming year.

We will see you again for the second year of TICMEA International Conference.

Thank You

Pontianak, August 29th 2022

Helma Malini, Ph.D

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Entrepreneurship Education Based on Entrepreneurship Ecosystem for Increasing Entrepreneurial Competence in Densely Populated Areas of DKI Jakarta

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Abstract: Indonesia is predicted to experience a demographic bonus in 2032, but on the one hand, Indonesia is still experiencing social problems, especially in major cities, one of which is DKI Jakarta. There is still found densely populated environments that allow the emergence of social problems that will arise, including poverty unemployment, drug abuse, criminality, promiscuity, thuggery, human trafficking, and so on. Efforts that can be made to overcome this social problem are through the educational process, namely entrepreneurship education. Entrepreneurship education has an important role in providing a new orientation and increasing entrepreneurial intentions for learners. Entrepreneurship education based on the real experience of learners is proven to increase the competence of learners. This paper uses literature studies, collecting a variety of literature relevant to the entrepreneurial ecosystem and the increase of entrepreneurial co-existence. The results of this study are formulations for strengthening entrepreneurship education in increasing entrepreneurial competence.

Keywords: Entrepreneurship Ecosystem, Entrepreneurial Competence

INTRODUCTION

Indonesia is in a population transition (Maryati et al., 2021). Marked by the results of a survey by the Central Statistics Agency released in January 2021, it is suggested that 70.72% of Indonesians are dominated by the productive age. So Indonesia is predicted to enjoy demographic bonus opportunities in 2032. This demographic opportunity is an opportunity for Indonesia to become an engine for economic growth. To optimize this demographic bonus opportunity, the government has a role to improve the quality of human resources in Indonesia.

DKI Jakarta as the capital city is the center of the economic sector, however, in DKI Jakarta there are still problems with housing and environmental aspects. From the data BPS Provinsi DKI Jakarta (2017)) it was found that the ranking of the number of Rukun Warga (RW) was included in the category of slums in order based on the middle city. This data collection uses 11 indicators, namely (1) population density, (2) building density, (3) building quality, (4) poor ventilation and enumeration, (5) bad latrines, (6) frequency of garbage collection, (7) how to dispose of garbage, (8) waterway conditions, (9) road surfaces, (10) shoulder-to-shoulder mapping patterns, and (11) public street lighting. DKI Jakarta is also found to be an area with a high population density (Akbar, 2020).

Dense settlements often arise social problems, including high unemployment including poverty, drug abuse, crime, promiscuity, human trafficking, and so on (BPS Provinsi DKI Jakarta, 2017; Utomo, 2015). Entrepreneurship education is a solution to reducing existing social problems through the entrepreneurship sector (Sukardi et al., 2014; Utomo, 2015). Increasing the capacity and ability of entrepreneurship through educational interventions in vulnerable communities can have a positive impact not only on themselves but also have an impact on the surrounding environment (Nur Isna Deraputri et al., 2017; Pattanayak & Peri, 2018; Sukardi et al., 2014;

Thieme, 2015). Entrepreneurship education by optimizing the environmental potential of various levels of education is expected to be more effective and sustainable (Hapsari et al., 2021).

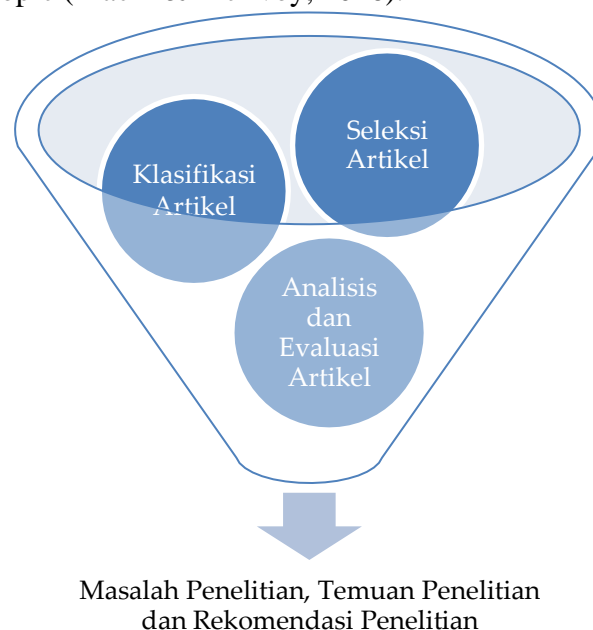
One of the channels in growing and providing orientation about entrepreneurship is through education. Educational institutions have an important role in fostering the development of innovation and entrepreneurship (Guerrero et al. 2016). Correspondingly Zhang (2020) explained that education from elementary to high level plays a role in developing the capacity of students to face uncertainty and risks in the future. Then formal schools also make a positive contribution to preparing students for the future (Najeb 2014). Educational institutions are considered to have a role in instilling the competencies needed by the community (Lackeus 2019). Entrepreneurship learning is an important concept in developing entrepreneurship (Wang & Chugh, 2014). Entrepreneurship learning also has a positive influence on the formation of entrepreneurial attitudes, intentions, and activities (Lorz et al., 2013). But on the other hand, entrepreneurship learning also needs to map those who are interested in the field of entrepreneurship, because if forced, it will have a negative impact (Nabi et al., 2016).

The use of the entrepreneurial ecosystem is believed to be able to increase the development of new business growth areas (Acs et al. 2017; Malecki and Edward Malecki 2018a). Efforts to optimize the entrepreneurial ecosystem require the preparation of human resources who can optimize it. Optimization of the entrepreneurial ecosystem as a source for entrepreneurship at least needs to involve large companies, schools, financial companies, and public organizations (Brown and Mason 2017).

Entrepreneurship education is expected to encourage individuals to start their businesses, which will create opportunities not only for themselves but also for others (Hameed & Irfan, 2019). In the long term, the contribution of entrepreneurship education is not only for individuals but also has an impact on economic progress both locally, regionally, and nationally (Galvão et al., 2020). In the long term, the contribution of entrepreneurship education is not only for individuals but also has an impact on economic progress both locally, regionally, and nationally (Erik Stam, 2015).

METHOD

Writing this article by conducting a literature review. The purpose of this article provides a comprehensive and critical literature review of empirical research in entrepreneurship education and the entrepreneurial ecosystem (Ghina, 2014). A literature review is an organized way to research the chosen topic (Machi & McEvoy, 2016).



Stage 1:

Conducting a selection of articles related to entrepreneurship education and the entrepreneurship ecosystem.

Stage 2:

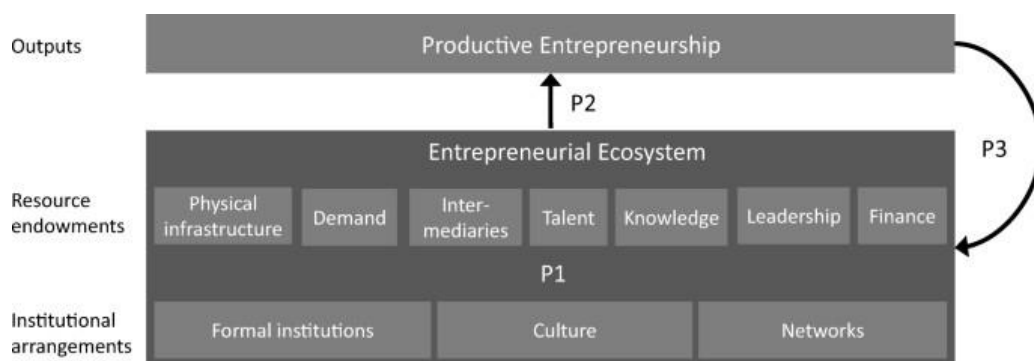
Classifying articles by grouping articles that have deeper relevance related to entrepreneurship education and the entrepreneurial ecosystem.

Stage 3: Conduct analysis and evaluation of articles that have been grouped.

The results of the analysis of this article become a study in the findings and discussions in this article by reviewing research problems, research findings, and research recommendations.

RESULTS AND DISCUSSION

The model of the entrepreneurial ecosystem once offered by Erik Stam (2014), includes framework conditions (formal institutions, culture, physical infrastructure, and demand) and systemic conditions (networking, leadership, finance, talent, new knowledge, and support services) that affect entrepreneurial output (entrepreneurial activity) and results indicating value creation (productivity, income, employment, and well-being).



Then other research from Audretsch & Belitski (2016) by offering the domain of the entrepreneurial ecosystem as follows culture, formal institutions, infrastructure and facilities, IT, Melting Pot, and demand. The framework of the entrepreneurial ecosystem determines who is an entrepreneur, how individual perceptions support entrepreneurial decision-making in the area, and how different domains influence entrepreneurial actions and ecosystem outcomes (Andersson & Koster, 2011). The entrepreneurial system is "a dynamic and institutionally embedded interaction between entrepreneurial attitudes, abilities, and aspirations, by the individual, which encourages the allocation of resources through the creation and operation of new ventures (Ács et al., 2014)

More to previous research from Audretsch and Belitski (2016) entrepreneurial ecosystems as institutions and organizations as well as systemized factors that interact and influence each other in shaping entrepreneurial opportunities. Correspondingly Mack and Mayer (2015) The entrepreneurial ecosystem is defined as the interacting components of the entrepreneurial system, which encourage the creation of new enterprises in a specific regional context.. Corroborated by (Roundy, 2017) explains the entrepreneurial ecosystem is an agent of soil structure, institutions, and cultural values that produce entrepreneurial activities. At least the entrepreneurial ecosystem covers three dimensions, namely interaction, physical infrastructure, and culture (Theodoraki, 2017).

So from the description above, a common thread can be drawn that the entrepreneurial ecosystem is an environment that interacts with each other and supports fostering the

development of entrepreneurship in an area. The entrepreneurial ecosystem consists of at least several important elements, namely policy, markets, capital, human skills, culture, and conducive support. This element shows that the entrepreneurial ecosystem of each region will have its specialties considering that each region has its uniqueness.

The concept of an entrepreneurial ecosystem needs to be explored more deeply to answer questions conceptually theoretically and empirically (E Stam, 2021). Previous research and experts provide a related definition of the entrepreneurial ecosystem. Spigel (2017) mentioned that the entrepreneurial ecosystem has a special characteristic according to the potential of the region, the point of success in the development of the entrepreneurial ecosystem with the creation of social and economic systems to support the creation and growth of new businesses. The entrepreneurial ecosystem is a series of individual elements consisting of leadership, culture, capital markets, and consumers who have an open mind that has complexity in interactions (Malecki & Edward Malecki, 2018a). Isenberg (2010) explains that elements of the entrepreneurial ecosystem require conducive policies, markets, capital, human skills, culture, and support.

Entrepreneurship education with the interaction between individuals and the environment can increase the competence of students (Morris et al., 2013). Reinforced by Kassean et al. (2015) in research provide input that entrepreneurship education should focus on the real world, actions, and reflective processes so that learners can automatically get a learning experience. In the long-term process, it will have an impact on improving the performance of students in the field of entrepreneurship which can provide benefits both individually and in community groups. Fernández-Mesa and Alegre (2015) mentioned that entrepreneurship education can provide an orientation about entrepreneurship, this will have implications for the ability of students in managing managerial which can increase the output of a business. Strong educational results will provide a strong entrepreneurial orientation in the future, increasing entrepreneurial readiness (Cope, 2011).

CONCLUSION

In the end, it can be concluded that the entrepreneurial ecosystem has an important role in entrepreneurship education. The role that can be done by providing support from the world of academic is providing the best service through a strong curriculum to develop the potential of students in developing new businesses. The interaction between the components of the entrepreneurial ecosystem is also expected to be able to make a positive contribution to the development of sustainable entrepreneurship education, thus it is hoped that entrepreneurship education can increase the readiness of students in the field of entrepreneurship. Further research is expected to examine more deeply the contribution of each component in the entrepreneurial ecosystem in supporting entrepreneurship education.

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Electronic Money Growth During Pandemic

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Abstract: The cashless payment system was introduced in 2007 in Indonesia, but the development of electronic money instruments in Indonesia has been slower than expected. Indonesian has experienced a pandemic since March 2020 and since then the mobility of individu has been limited so that it is difficult to make cash transactions. The research aim to explain the growth of electronic money during the pandemic. The analysis uses descriptive analysis of monthly data from the number of instruments and transaction values. The results shows that during the 24 months of the pandemic the value of electronic money transactions had an average of 56,609.88 billion with an average number of instruments of 462.29 million units. During the pandemic, it is recommended that economic transaction activities use electronic money, causing an increase in the average transaction value of 112.60% compared to 24 months before the pandemic.

Keywords: Electronic Money, Pandemic, Instrumen, Transaction Value

Introduction

Revolution 4.0 in the field of technology also touches human daily activities, seen in changes in people's lifestyles in making payments. The change in the payment system from cash to non-cash has become a lifestyle, especially among the younger generation is known as the cashless society. Changes in the payment system are an opportunity for banks to compete in reaching more customers, especially to increase non-cash payment transactions. The non-cash payment system has been introduced since 2007 in Indonesia, with the speed, convenience, security, convenience of minimal costs in carrying out daily transactions which are added values that have caused a shift in the payment system from cash to non-cash. People began to change the habit of carrying large amounts of cash in their wallets, because it was unsafe and impractical. However, the use of electronic money is not a substitute for using cash, because there are areas where shops or merchants still make payments in cash.

However, the development of electronic money instruments in Indonesia is relatively slow when compared to what is expected. Throughout 2012 to 2019 the increase in the number of electronic money instruments is shown in table 1, the number of instruments decreased in 2014 and 2015. The number of money instruments in circulation in 2019 was 292.29 million units.

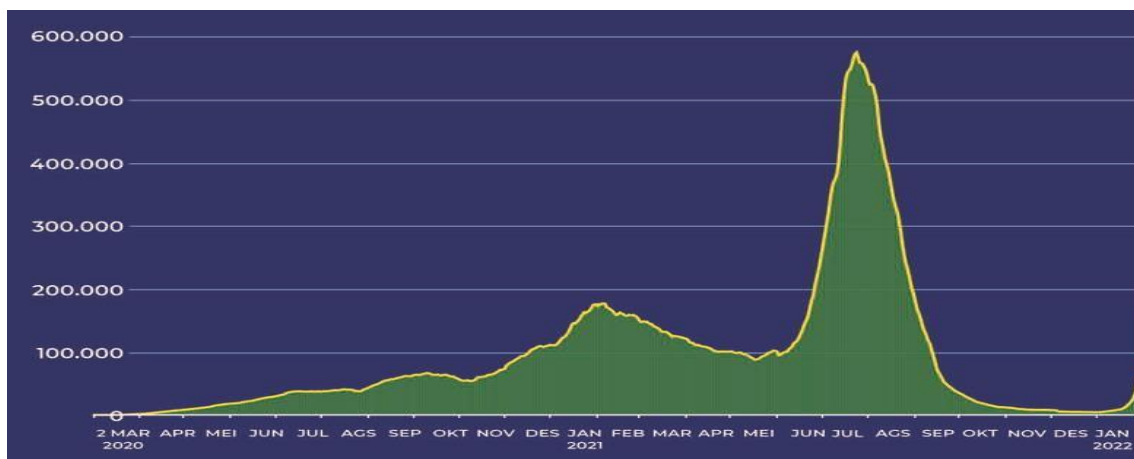
Table 1. Number of E-Money Instrumen (Millions of Unit)

Year	Number Instrumen	Chip Based	Server Based	Growth (%)
2012	21,87	-	-	-
2013	36,23	14,94	21,28	65,63
2014	35,74	15,80	19,94	-1,34
2015	34,31	20,36	13,96	-3,98

2016	51,20	26,38	24,82	49,22
2017	90,00	40,91	49,09	75,77
2018	167,21	55,48	111,72	85,77
2019	292,30	60,34	231,96	74,81

The year 2020 began with concerns about the existence of infectious diseases in several countries, the corona virus disease-19 (Covid-19). The Indonesian nation imposed a pandemic condition since March 2020, there was a change in the order of life during the pandemic, namely with restrictions on people's movement (mobility) which greatly impacted various sectors. Changes in daily activities from offline to online (mobile applications) are unavoidable, especially with the presence of mobility barriers, electronic transactions are a safe choice in economic activities such as shopping for daily necessities through market places, using banking services through e-banking, and various other financial transactions. Changes in social conditions during the pandemic with limitations in conducting transactions also affect the psychology of society in general. Changes in psychological and social conditions are the biggest variables influencing economic decisions (Pratiwi and Untari, 2020).

Figure 1. Covid-19 Case



The pandemic that has lasted more than 2 years has a specific impact on economic activity as seen by the contraction in economic growth, in conditions like this how the development of the number of electronic money instruments and the value of their transactions every quarter during the pandemic. The research aim to explain the growth of electronic money during the pandemic.

Literature Review

The non-cash payment system (e-money) in Indonesia was introduced in 2007 and its operation is regulated through Bank Indonesia regulation Number 11/12/PBI/2009 tanggal 13 April 2009 tentang Uang Elektronik (*Electronic Money*) dan Surat Edaran Bank Indonesia No.11/11/DASP tanggal 13 April 2009 perihal Uang Elektronik (*Electronic Money*). Electronic Money (*Electronic Money*) is defined as a means of payment that meets the following elements 1) issued on the basis of the value of money that was deposited in advance to the issuer, 2) the value of money is stored electronically in a medium such as a server or chip and 3) the value of money electronically managed by the issuer is not a deposit as referred to in the law governing banking.

Bank Indonesia (2011) explains that the payment system is a system or method used to make transactions more effective and efficient in economic activities in the public that involve parties involved in these economic activities. The parties related to the implementation of electronic money include users of electronic money cards, principals who manage systems or networks, issuers who issue electronic cards, Acquirers who cooperate with merchants or shops, merchants or shops that accept payments with electronic money, organizers clearing and the last is the organizer of the final settlement (Bank Indonesia, 2011; Bank Indonesia, 2018; Bank Indonesia, 2019). According to Bahri (2010), several types of electronic money transactions include card issuance and top-up or loading. Then the payment transaction at the merchant or merchant with the agreed terms. Next is the transfer between electronic money holders. Next is cash withdrawal. Other transactions are Refund/Redeem or exchange the value of electronic money back to the issuer.

Types of Electronic Money and Limit Value of Electronic Money

1. Types of electronic money based on whether or not the identity data of the holder is recorded at the issuer of Electronic Money is divided into:
2. Registered Electronic Money is Electronic Money whose identity data of the holder is registered/registered at the Electronic Money issuer. In this regard, issuers must apply the principle of knowing their customers in issuing Registered Electronic Money. The maximum limit for the value of Electronic Money stored on a chip or server media for registered types is Rp. 5,000,000.00 (five million Rupiah).
3. Unregistered Electronic Money, is Electronic Money whose holder identity data is not registered/registered at the Electronic Money issuer. The maximum limit for the value of Electronic Money stored on a chip or server media for the unregistered type is IDR 1,000,000.00 (one million Rupiah).

The creation and circulation of electronic money in transactions is regulated by the government through institutions with the function of a monetary authority, and in Indonesia according to the provisions of the applicable laws, the institution that has this function is Bank Indonesia. Parties in the operation of electronic money :

1. Cardholder is a legal user of Electronic Money.
2. Principal is a bank or institution other than a bank that is responsible for the management of the system and/or network among its members, either acting as issuer and/or acquirer, in Electronic Money transactions in which cooperation with its members is based on a written agreement.
3. Issuer is a bank or institution other than a bank that issues Electronic Money.
4. Acquirer is a bank or institution other than a bank that cooperates with merchants, which can process Electronic Money issued by other parties.
5. Merchants are sellers of goods and/or services who receive payments from transactions using Electronic Money.
6. Clearing operator is a bank or non-bank institution that calculates the financial rights and obligations of each issuer and/or acquirer in the context of Electronic Money transactions.
7. Final settlement operator is a bank or institution other than a bank that performs and is responsible for the final settlement of the financial rights and obligations of each issuer and/or acquirer in the context of Electronic Money transactions based on the results of calculations from the clearing operator.

Digital economic and financial transactions have increased rapidly in line with the use of digital platforms and instruments during a pandemic such as e-wallet services, the increase in digital transactions shows high consumption so that it can increase economic growth (Alamanda Putri, Samaria Nauli and Gede Nyoman Mindra Jaya, 2021; Suwarni, 2021).

Methods

The research method used is descriptive quantitative that is to describe or explain about a state of electronic money using numbers. The stages of the descriptive method start from data collection, interpretation of the data and the appearance and results

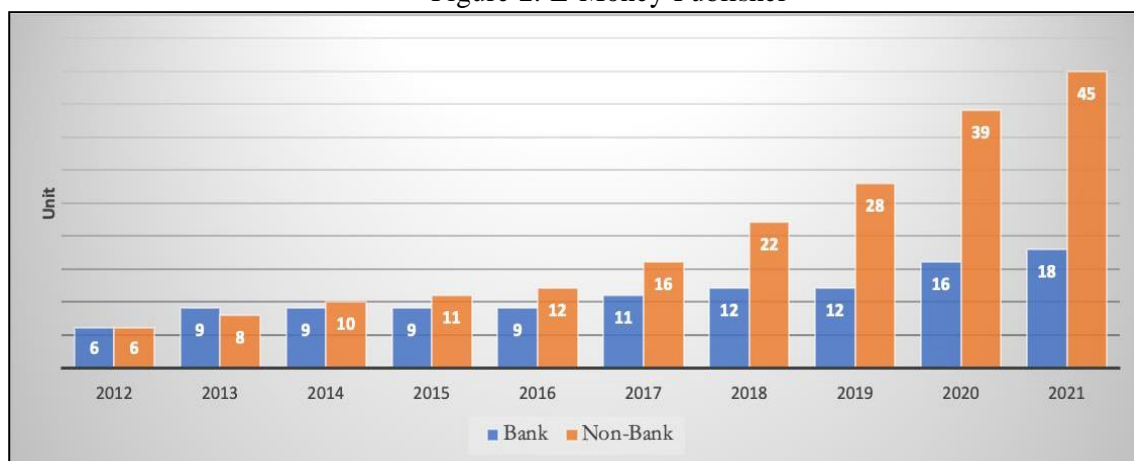
Descriptive analysis on monthly data from the number of instruments, volume and value of e-money transactions during the pandemic. The data source comes from Bank Indonesia and the data sample is monthly data for 24 months of the pandemic starting from March 2020 to February 2022.

Findings

The Government through Bank Indonesia, Banks and other economic actors have carried out various kind of technological innovations in migrating economic transactions from offline to online since the introduction of electronic transactions using electronic money and the momentum for this transition of economic transactions occurred during the Covid-19 pandemic.

Electronic money is issued by banks and non-banks and the number of e-money issuers continues to grow, especially from non-bank institutions (figure 2). Non-bank companies include telecommunications companies such as Telekomunikasi Seluler (T-cash), Indosat (Paypro/dompetku), XL Axiata (XL Tunai), Smartfren Telecom (uangku). Terdapat pula kategori perusahaan selain bank dan perusahaan telekomunikasi yang menerbitkan uang elektronik yaitu PT Dompet Anak Bangsa (go-pay), PT Espay Debit Indonesia Koe (dana), PT Visionet Internasional (OVO cash), PT Airpat Internasional Indonesia (shopeepay), PT Fintek Karya Nusantara (LinkAja) and other companies that have been registered with Bank Indonesia.

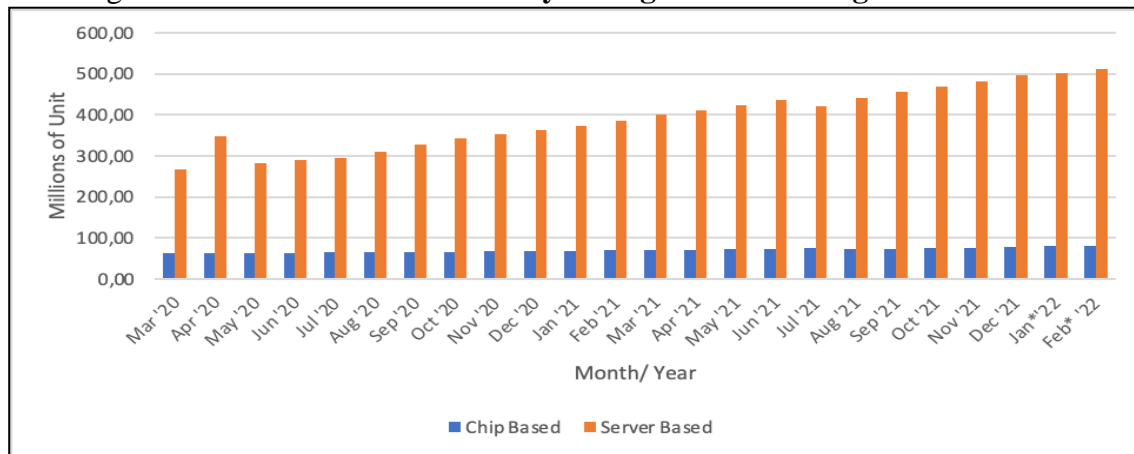
Figure 2. E-Money Publisher



The increase in the number of e-money publisher is dominated by non-bank institutions, especially financial technology, until 2021 the number of non-bank institutions issuing e-money is 45 from 63 Publisher (figure 2).

The number of e-money instruments issued (figure 3) increased dramatically during the pandemic, indicating that people have become more accustomed to using electronic money in transactions during pandemic conditions. Examples of electronic money storage media are card-based such as Mandiri E-money, BCA Flazz, Brizzi BRI, etc. as well as server-based ones such as Gopay, OVO, LinkAja etc.

Figure 3. Number of Instruments by Storage Media During Pandemic Covid-19



Transaction volume decreased at the beginning of the pandemic due to a decrease in the use of card-based e-money (figure 4). However, the use of server-based e-money remains high (figure 3) with an increasing trend and this condition shows that people are starting to switch to online transactions using server-based e-money.

The number of e-money instruments which continued to increase during the 24 months of the pandemic (March 2020 - February 2022) had an average figure of 462,28 million units with an average transaction value of 56.609,88 billion rupiah with an average

Figure 4. Volume of E-Money Transaction During Pandemic Covid-19

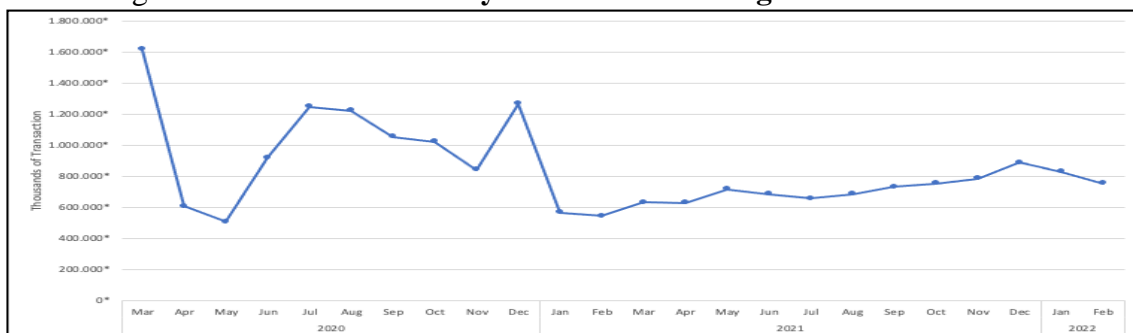
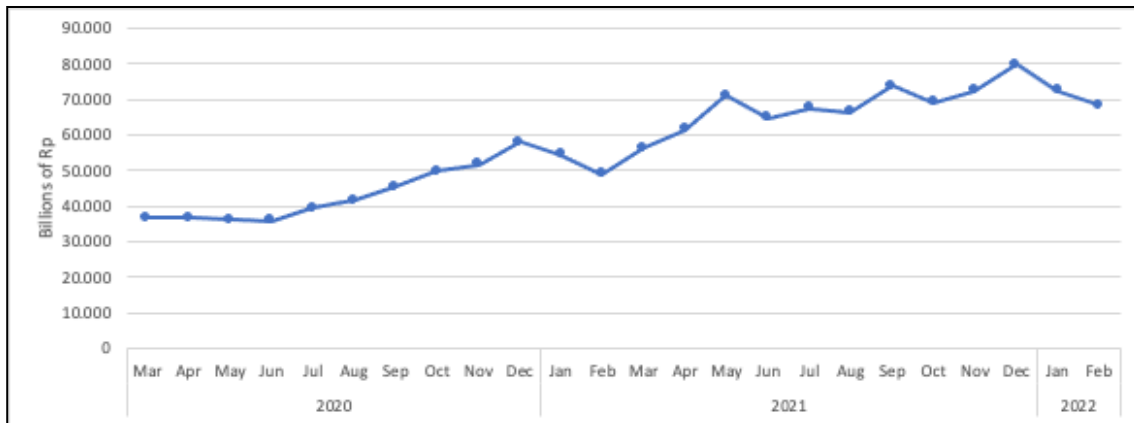


Figure 5. Value of E-Money Transaction During Pandemic Covid-19



Quarter II (April – June 2020)

In March 2020, Covid-19 cases were increasing and to prevent the spread from spreading further, people's mobility was limited so that it affected economic activities, especially the business world. However, from a different point of view, these restrictions have caused people to start switching from offline transactions to online transactions. The number of E-money instruments during the second quarter is shown in Figure 4 with the growth of e-money increasing in April but the transaction value is relatively the same.

Quarter III (July – September 2020)

The pandemic is entering its 5th month where the economy is shaking with the value of GDP in the second quarter of 2020 experiencing a contraction of 4.19%, entering the third quarter of E-money experiencing increasing growth, as seen by the transaction value which began to increase (figure 5).

Quarter IV (October – December 2020)

The end of 2020 closed with unstable economic conditions, where the GDP value contracted again -0.42% but in contrast to GDP conditions, the value of e-money transactions continued to increase and the highest value throughout 2020 was in December reaching 57.936,64 billion rupiah (figure 5). Economic growth conditions like this are as expected considering the pandemic with restrictions on people's mobility has lasted for 8 months, only businesses related to medical devices, health services and basic commodities continue to run normally.

Quarter I (January – March 2021)

The year 2021 begins with economic conditions that experience contraction again while the value of e-money transactions has decreased in January by 5.89% and February by 9.96%. The decrease in transaction value has no effect on the number of instruments, as shown in Figure 3 the number of server-based instruments continues to increase and this condition illustrates the condition of people who are accustomed to transacting online and a cashless society has begun to form.

Quarter II (April – June 2021)

Entering a year of the pandemic, society and the business world have experienced many adjustments in their transaction behavior. The second quarter of 2021 enters the expansion zone or there is a revival of the economy from its downturn. This is because the government has intensified vaccination for the public. The volume and value of e-money transactions increased in

April and May 2021 (figure 4 and 5) but decreased again in June with an increase in Covid-19 cases (figure 1).

Quarter III (July – September 2021)

The economy, which is considered to have recovered, experienced shocks in the third quarter, in June and July 2021 the government again imposed restrictions on public activities (PPKM) due to a surge in cases of delta variant covid-19. The re-enactment of the PPKM has caused people to return to online transactions, as seen in the volume and value of e-money transactions increasing during the third quarter (figures 4 and 5).

Quarter IV (October – December 2021)

The year 2021 is closed with a positive thoughts, where the Covid-19 cases have been controlled and the economic recovery continues. The Indonesian economy closed with a 2021 growth rate of 3.69% (yoy). The value of E-money transactions reached its peak in December of 79806.52 billion rupiah.

The year 2022 begins with economic conditions that continue to experience recovery and the community has found a new normal way of life with COVID-19. When compared to the growth in the number of instruments, volume and value of e-money transactions during the 24 months before the pandemic with the 24 months during the pandemic, a significant increase was seen. The average number of instruments before the pandemic was 196.75 Millions of Unit and the average during the pandemic was 462.28 Millions of Unit an increase of 134.95%. The average transaction volume before the pandemic was 839360.79 Thousands of Transaction and the average during the pandemic was 614909.26 Thousands of Transaction, an increase of 36.50%. And the average transaction value before the pandemic was 56609.88 Billions of Rp and the average during the pandemic was 26626.90 Billions of Rp, an increase of 112.60%.

Conclusion

The use of electronic money has replaced the use of cash, especially during the pandemic when PPKM was implemented. The results shows that during the 24 months of the pandemic the value of e-money transactions had an average of 56,609.88 billion with an average number of instruments of 462.29 million units. Although at the beginning of the pandemic there was a decrease in transaction volume, namely in March and April 2020, the number of instruments continued to increase, especially server-based instruments, this condition shows that people are starting to switch to online transactions using server-based e-money. During the pandemic, it is recommended that economic transaction activities use electronic money, causing an increase in the average transaction value of 112.60% compared to 24 months before the pandemic.

Further research is needed whether during the pandemic the increase in the value of electronic money transactions was contributed by consumption activities and whether the increasing number of instruments was spread evenly throughout Indonesia or concentrated in big cities.

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Analysis of the Application of Resources Based View (RBV) in Society era 5.0 in Maintaining Company Business Competition

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Abstract: This study aimed to analyze the application of Resources Based View (RBV) in society in the 5.0 era in maintaining the company's business competition. This research uses qualitative research with a descriptive analysis approach. The purpose of this study is to identify and analyze the condition of resources and capabilities owned by Gojek Indonesia using a resource-based view (tangible resource, intangible resource, human resource and capability) analysis to increase competitiveness in the face of increasingly high business competition. Based on the results of data analysis, it can be concluded that the application of the ResourcesBased View carried out by the Gojek company has been convenient. This is because the company's resources are divided into two types, namely tangible resources (financial, use of technology, company facilities and services) and intangible resources in the form of companyhuman capital.

Keywords: Analysis, Resources Based View, Competitive Advantage.

A. INTRODUCTION

Remarkable progress in science and technology, especially in computing power, has made a very high contribution to improving people's business (Sugiyanto et al., 2018). This is a simultaneous response because the world is experiencing challenges on a larger scale, such as global warming, economic inequality, and terrorism. The development of the era is full of uncertainty, the period of disruption continues to expand; therefore, understanding Information and Communication Technology is essential and needs to be maximized to gain new knowledge to create new values for analyzing the relationship between humans and objects, or between the natural world and the virtual world to solve problems effectively and efficiently (Waluyo, 2020).

Overcoming this challenge by encouraging stakeholders at various levels to share the same vision of the future will be essential to realizing such a society through digitization (Kholik & Laeli, 2020). This is related to the proposal from the Japanese Cabinet with the 5th Science and Technology Basic Plan, which has the vision to create a Super Intelligent Society. This Super Intelligent Society is the fifth stage of development in human civilization, which was previously dominated by the hunter, agrarian, industrial, and information societies (Paul & Murdapa, 2018). The story of the community can be seen in the following illustration:

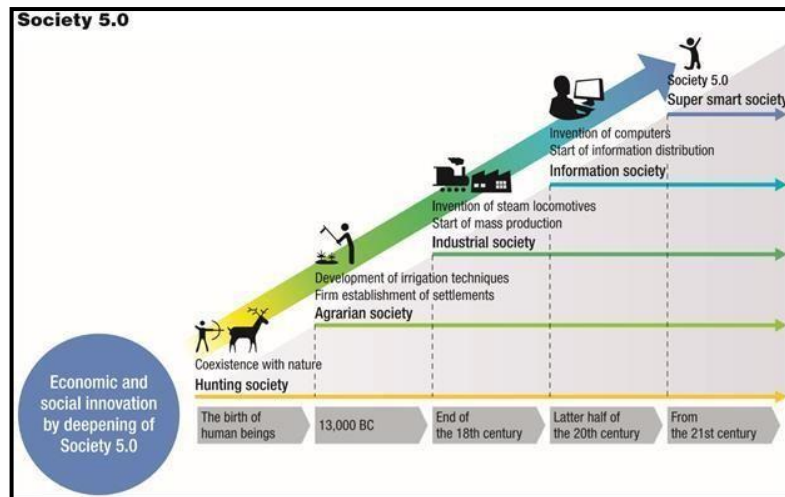


Figure 1. Economic and social innovation by deepening of society 5.0
 Source: Padjajaran Fest & Conference

The hallmark of this community is the Sustainable Development Goals (SDGs); in adopting this concept, the Japanese government makes several principles in its guidelines and provides collaboration in its implementation which includes the following: a) creating a global future through Society 5.0; b) enabling the solution to use global data; c) promote cooperation at the global level; and d) fostering human resources to carry out STI efforts for the SDGs (Heng, 2021).

The rapid growth of the industrial sector allows large companies with solid and large-scale capital and creates intense competition between companies in the industry (Nandi et al., 2020). In reality, the competition can be a healthy or unhealthy competition that can bring down the other party. Unfair competition can be in the form of monopolistic practices or barriers to market entry (Mardana, 2020). In this free business competition, the condition for a company to be successful is to try to achieve the goal of creating and retaining customers (Dubey et al., 2019). To achieve this goal, every company must produce and deliver the goods and services that consumers want according to their needs and desires.

The development of strategic management studies is overgrowing because it not only touches practical business policies but also enters the empirical area. In addition, early results emphasize the compatibility between strategy and structure (Waluyo, 2020). Then, Business Strategy moves to the contribution of industrial organizations, which highlights external factors of higher education (Sukma, 2018). The concepts that have been developed include Business strategies in universities. Then, Business Strategy moves on to Externally Driven and Internally Driven contributions to strategic management (Sugiono, 2019). Furthermore, the resource-based view emerged and was considered a new strategic management perspective. In general, the RBV concept can be described as follows:

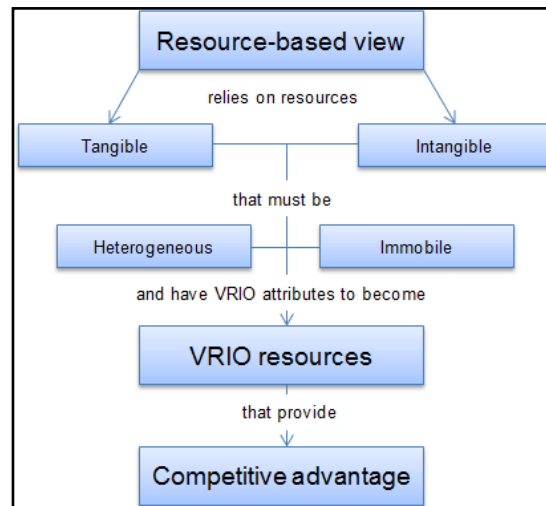


Figure 2. RBV concept to improve company competitiveness

In the face of intense competition, companies are required to develop appropriate competitive strategies in changing market situations. The need for strategy evaluation as a correction whether the process that has been implemented has reached the level of competitive advantage (Collins, 2021). Identification of the weaknesses and strengths of an organization is trying to explore a competitive advantage; the identification process will display the company's stability to take advantage of competitors' weaknesses. Like other business organizations, hospitals are also required to have a competitive advantage in the face of increasingly fierce competition (Burt & Soda, 2021). To obtain a competitive advantage, a company or business organization must analyze its resources to identify its weaknesses and strengths to build the ability to achieve these advantages (Gerhart & Feng, 2021).

For this reason, it is necessary to have an internal approach that includes company resources that can create a competitive advantage (Chen et al., 2021). In strategic management, the view that resources ultimately determine the sustainability of the organization, such as winning in competition and growing, is called RBV (Resource Based View), which is a method for analyzing and identifying a company's strategic advantages based on a review of the combination of assets, expertise, capabilities, and intangible assets (Chatglou et al., 2018). Thus, it can be seen that this research is about the RBV approach used to evaluate each company's competitive strategy. This approach includes internal resources owned by the company, which shows that companies have resources and capabilities that are not owned by other companies and provide practical value for the company itself (Alexy et al., 2018).

One company that has implemented this is Gojek Indonesia. Gojek Indonesia, founded in 2010, provides services ranging from online-based transportation, food delivery services, and others. Gojek is available in Indonesia, Vietnam, Thailand, and Singapore. In July 2019, Gojek announced to the public about the launch of its new logo called Solv with a shape like an inverted on/off button. Intending to be a solution to consumers' daily needs, the Gojek company is very aware of how vital brand image is for a company. Service quality compares the service perceived by the customer and the service quality expected by the customer. Therefore, it can be concluded that service quality is provided with the hope that customers can feel satisfied with the service. In addition, several measurement dimensions can be used to assess service quality, namely tangible, reliability, responsiveness, assurance, and empathy.

In society 5.0, a value can be generated through AI extensive data analysis, which has a database that includes a lot of sensor data, weather, personal history, accommodation, traffic, and other data, including the following: a) simplify travel by providing road routes that according to personal preferences, as it takes into account traffic and other weather conditions; b) perform smooth movements by combining vehicle sharing services, public transportation and others and c) enable the elderly and people with disabilities to experience these conveniences (Davis & DeWitt, 2021; Waluyo et al., 2019).

From the point of view of implementing Gojek's new value in the industry, AI extensive data analysis includes various types of information such as customer and consumer requests, supplier information, shipping information and other matters such as a) carrying out flexible production planning and inventory management in response to needs market and build relationships with other business fields and industrial suppliers outside of business that can be done; 2) make distribution more efficient with cross-industry and additional cooperative shipping; and 3) enabling customers as well as consumers to get cheap valuables without delays in delivery according to the time needed. Therefore, the authors are interested in analyzing the application of Resources Based View (RBV) in the 5.0 era society in maintaining the business competition of the Indonesian Gojek company.

B. METHOD

This research uses qualitative research with a descriptive analysis approach. The purpose of this study is to identify and analyze the condition of resources and capabilities owned by Gojek Indonesia using a resource-based view (tangible resource, intangible resource, human resource and capability) analysis to increase competitiveness in the face of increasingly high business competition. The data collected in this study used interviews with Gojek Indonesia staff and literature studies, while the data in this study were primary and secondary. et al., 2018).

C. RESULT AND DISCUSSION

This study was conducted to determine the application of RBV (Resources Based View) theory which includes tangible resources, intangible resources, and organizational capabilities to identify whether the company's resources are weaknesses or strengths. Based on the data obtained, the results can be explained, among others, as follows:

1. Company Resource Identification

Based on the results of interviews with company staff, the identification of the Gojek Indonesia company obtained the following data:

a. Tangible Resources

The Tangible Resources of this company can be seen from the company's financial sources. In mid-2021, this company is part of the GoTo company with Tokopedia, which has a company valuation of 18 billion US dollars or around IDR 257 trillion. Based on data from the Central Statistics Agency, GoTo's contribution figure reached the range of IDR 308 trillion and recorded a Total Gross Transaction (GTV) as a group of more than 22 billion US dollars or around IDR 314 trillion at the end of 2020 with the following information: a) more than 1.8 billion transactions in 2020; b) more than two million registered driver partners; c) more than 11 million business partners as of December 2020; more than 100 million monthly active

users; d) recorded GTV as a group of more than 22 billion US dollars; and e) recorded a contribution of 2 per cent to Indonesia's total GDP.

b. Company Facilities and Services

Until now, the Gojek application has given 17 different types of services; Gojek has implemented all of the application's services, including: 1) Go-Ride, Go-Ride is a motorcycle transportation service that can quickly and efficiently carry you to numerous locations; 2) Go-Car, Go-Car is a transportation service that utilizes a car to carry you to and from various locations; 3) Go-Food, a food delivery service with a database of over 30,000 restaurants; 4) Go-Mart, Go-Mart is a service that allows you to shop for thousands of different items from a variety of different retailers in your neighborhood; 5) Go-Send, Go-Send is a 60-minute courier service that allows you to send messages and packages; 6) Go-Box, Go-Box is a large-scale good movement company that utilizes trucks, automobiles, and blind vans; 7) Go-Tix, Go-Tix is an event information service that provides customers with direct access to purchase and delivery of tickets; 8) Go-Med, Go-Med is a joint venture between Gojek and Halodoc. Go-Med does not sell products but connects consumers to over 1000 pharmacies throughout Greater Jakarta, Bandung, and Surabaya; 9) Go-Massage, Go-Massage is a mobile health massage service that travels directly to the customer's home. 10) Go-Clean, Go-Clean is a professional cleaning service that cleans boarding rooms, residences, and offices for consumers; 11) Go-Glam, Go-Glam provides beauty care services like as manicures and pedicures, cream baths, and waxing to customers' homes; 12) Go-Auto, Go-Auto is a vehicle cleaning, maintenance, and repair service; 13) Go-Busway, Go-Busway is a service that allows users to watch Transjakarta bus timetables and order a Go-Ride to carry them to their destination; 14) Go-Pulsa, Go-Pulsa are services for buying credit or internet with a payment system using a Go-Pay balance; 15) Go-Bills, Go-Bills are bill payment services such as electricity bills, purchase electricity tokens to BPJS with a payment system using a Go-Pay credit; 16) Go-Points, Go-Points is a loyalty program from Gojek specifically for Go-Pay users. Every transaction using Go-Pay will get one token. Users can play passes collect points to get attractive rewards, and 17) Go-Pay, Go-Pay is a virtual wallet service to facilitate user transactions in the Gojek application.

c. Technology Utilization

Gojek can be purchased using the Gojek App, which can be downloaded from the Google Play or Apple App Stores. Within one month of its launch, this application amassed 150,000 downloads and a rating of 4.4 out of 5 stars. There are two methods of payment: cash or Gojek Credit or Go-Pay. Go-Pay is Go-cashless Jek's payment system that may be used to pay for any service.

At first, Gojek offered only four types of services: courier (90-minute delivery everywhere in the city), transportation (transparent pricing, complimentary masks and shower caps), and food delivery (delivering your favourite food under 60 minutes in). Jabodetabek)

and shopping services with a nominal value of less than one million rupiahs (purchase food, tickets, medicine, or anything else worth less than IDR 1,000,000). Gojek continues to grow by bringing in various innovations in other services by utilizing technology.

d. Intangible Resources

Gojek's intangible resources lie in its Human Resources and organizational structure. The organizational structure used by Gojek Indonesia is the Functional Organizational Structure, namely the division of tasks into separate functional groups. The following will describe the organizational structure of Gojek Indonesia.

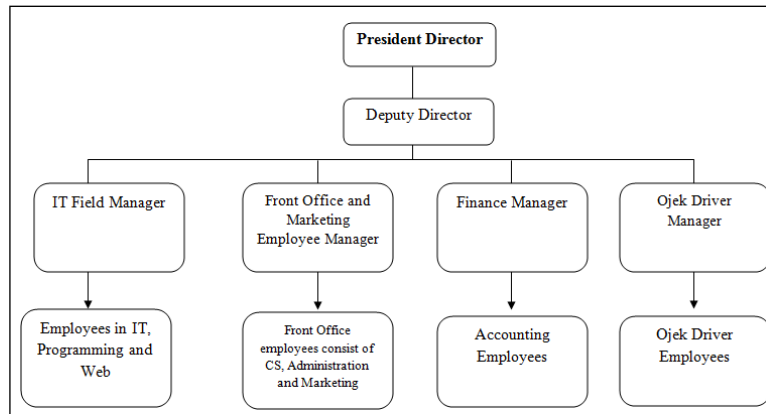


Figure 3. Gojek Indonesia Organizational Structure

There has been a change in views regarding various strategic resources for companies in today's business environment. The difference is from the dominance of physical resources to the supremacy of intangible assets. Suppose these companies refer to existing developments, namely knowledge-based management. In that case, companies in Indonesia will be able to compete using the competitive advantages obtained through creative innovations generated by the intellectual capital owned by the company.

The emergence of the belief that a company's competitive expertise is valuable, scarce, difficult to duplicate, and cannot be replaced by other forms of resources. According to Halim & Wijaya (2020), financial measures of a company's performance are extremely accurate. Human capital, with all its knowledge, ideas, and inventions, continues to be the driving force behind finance's value. Additionally, human capital is the lifeblood of a business. Businesses are made up of individuals who collaborate to accomplish specific aims. Without individuals, the organization cannot function.

While human resources or human capital can help a business increase its competitiveness, it's unfortunate that human resources are rarely given main attention in many businesses. Many business leaders are unaware that their company's revenues are derived from human capital; this is because their operations are seen solely from a business perspective (Sugiyanto & Sitohang, 2017). Company leaders do not view their organization as a unit with unique knowledge and skills, or as a collection of distinct business assets capable of differentiating their products or services from those of competitors, as a strategic company resource based on the fact that knowledge can be used to develop human resources.

Each structure has distinct responsibilities when it comes to human resource management; this division of responsibilities is critical for the company's growth. The

President Director is the most senior position and is responsible for the following duties: a) establishing and enforcing the company's highest rules and policies; b) leading and managing the company; c) accounting for the company's profits and losses; d) planning and developing sources of revenue and expenditure of company assets; e) determining the strategy for achieving

the company's Vision-Mission; and f) coordinating and supervising all communications. Meanwhile, the Deputy Director is responsible for aiding the President Director with all of his or her responsibilities as the representative of each area.

Additionally, the IT Manager is responsible for the following: a) Develop and implement Gojek's IT strategy and plans with the goal of streamlining work and better serving customers; b) Coordinate and manage the ICT sector's use of software, hardware, brassware, and networks in order to maximize Gojek Indonesia's performance; c) Manage computerized system design services and integrated device application programs; and d) Provide data required by other IT-related departments.

The Front Office and Marketing Employee Manager's responsibilities include the following: a) Train, assign, and evaluate front office employees; b) Ensure that employees are aware of the computerized system, the ethics of receiving complaints directly or via telephone, and Gojek's operational standards; c) Handle customer complaints that cannot be resolved by their subordinates; d) Create a customer list report; e) Maintain office staff discipline by issuing sanctions and warnings to those who violate; and f) Plan and determine all aspects of the front office.

The Accounting Manager is responsible for the following: a) Coordinate budget planning; b) Develop a financial submission and accountability format; c) Coordinate the audit's implementation; d) Implement a financial recording system; e) Oversee the deputy director; f) Plan, control, and make accounting decisions; and g) Receive reports on cash flows out and into the company. Meanwhile, motorcycle taxi managers are responsible for the following: a) Form groups of motorcycle taxi drivers; b) Coordinate all motorcycle taxi driver workers; c) Constantly monitor and manage every Gojek baseline; and d) Accountable to the deputy director for all motorcycle taxi driver employees.

The corporation stresses the Intellectual Capital part in this case; intellectual capital is an intangible asset that the company has and is one of the most valuable assets the company owns. Human capital is described as individuals who lend their capabilities, commitments, knowledge, and personal experience to businesses. Although not just from an individual's perspective, but also as a work team with personal relationships both within and beyond the organization.

Gojek believes that human capital is critical because it serves as a source of innovation and strategy renewal. This can be accomplished through brainstorming guided by the management vision, process reengineering, and the enhancement or growth of worker skills. Additionally, human capital adds value to the organization every day through motivation, commitment, competence, and effective teamwork. Employees can offer value by building business-owned competences, transferring information from workers to the organization, and altering management culture.

2. Analysis of the Influence of Company Resources on Competitiveness

Competitiveness can be understood as an ability to maintain market position in meeting product supply on time and the price offered by the company is still competitive flexibly in responding to changes in demand quickly, and product differentiation is carried out by increasing the capacity for innovation and effective marketing (Waluyo et al. ., 2021). Competitiveness has the meaning of strength in trying to outperform its competitors. However, the World Bank refers

to the size and rate of change in the value-added for each input unit obtained by the company.

A company with good competitiveness has the main prerequisites: labour, entrepreneurship, capital, technology and infrastructure. Companies that produce products with high competitiveness generally have a workforce with a classification of expertise or higher education, a force with high entrepreneurial Java, has a lot of capital, has/mastered technology that is qualified in its field, and has adequate infrastructure (Digdowiseiso et al., 2020). The competitiveness improvement strategy used by the Gojek company can be described as follows:

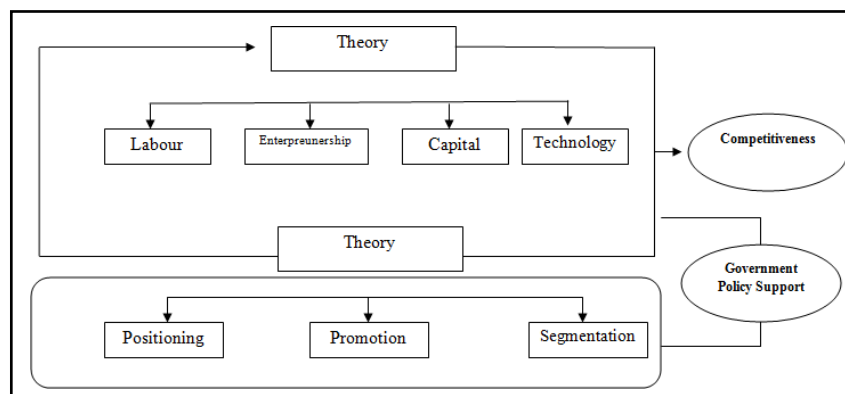


Figure 4. The process of utilizing resources to support the company's competitiveness

In this case, Gojek has utilized information technology to its full potential to become an added value for the company. Understanding Information Technology is a technology that uses data processing, processing, obtaining, storing, processing data in various ways to bring quality information results. The purpose of quality information is relevant, timely and accurate, for personal use, used by business or government and in the form of strategic information to be used as a tool in making decisions. Information Technology utilizes smartphone devices as a data processing tool, while networking connects users, while telecommunications technology is to disseminate data and be accessed (Waluyo, 2021).

In the era of the digital economy, to achieve a competitive advantage, things need to be considered, and the emphasis is on the aspects of convenience and speed. Many companies use Information Technology for business process optimization. The use of Information Technology can provide tools that can improve the performance and success of the company with the company's conventional sources of competitive advantage for low costs, excellent customer service or superior supply chain management (Waluyo et al., 2019). The indicators used in information technology variables are speed, information processing and connectivity of devices and internet technology.

In addition to these two things, Gojek has also carried out knowledge management to increase the company's competitiveness. Knowledge management is essential and plays a role

in organizations that show clear, easy-to-understand, and comprehensive initiatives and leadership. Knowledge management is one of the driving factors for a competitive and competitive Gojek company. This strategy is carried out to change intellectual assets, create new values, learn from the company, from the leadership level to all employees, and maximize skills as a collective entity. In the end, knowledge management involves three main components that are more synergistic. The main components involve human factors, organizational processes and technological factors. Meanwhile, the indicators used in knowledge management are the wider community's experience, considerations, values, and beliefs.

D. CONCLUSION

Based on the results of data analysis, it can be concluded that the application of the Resources Based View carried out by the Gojek company has been convenient. This is because the company's resources are divided into two types, namely tangible resources (financial, use of technology, company facilities and services) and intangible resources in the form of company human capital. The company utilizes this resource to increase competitiveness with three main components, namely knowledge management and technology development.

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ISLAMIC CORPORATE SOCIAL RESPONSIBILITY AND EARNING MANAGEMENT IN SHARIA BANKS

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ABSTRACT: This study was aiming to examine the ICSR disclosures made by Islamic banks and to examine the effect of Islamic corporate responsibility (ICSR) on earnings management and how earning management practices occur in Islamic banks in Indonesia. Earnings management variable was measured by discretionary accruals, ALLP, and SPOSM. This study used Islamic commercial banks registered with the financial services authority from 2012-2020 as the sample. Purposive sampling was chosen to be the sampling technique. Nine companies were the research sample out of 81 data in total. The data analysis technique used in this research was Structural Equation Modeling using Smart PLS software version 3.0. The results of the study indicated that Islamic banks are still not maximal in disclosing ICSR and ICSR has an insignificant negative effect on earnings management, and Islamic banks in Indonesia still practice earnings management that are contrary to Islamic sharia.

Keywords : Islamic Corporate Social Responsibility, Islamic Corporate Governance, Earning Management

Introduction

Indonesia is one of the countries with the largest Muslim population in the world. According to data released by The Pew Forum on Religion & Public Life, 87.2% of the total population of Indonesia is Muslim or around 209.1 people. Then if calculated at the world level, that number is 13.1% of the total number of people who adhere to Islam. The high number of adherents of Islam in Indonesia has resulted in increasing community needs in accordance with Islamic law (Alfi Kholisdinuka, 2021). The development of sharia business in Indonesia is evidenced by the increasing number of sharia banking, even almost all national banks currently have sharia business units (Fadhilah, 2019). People assume that companies that apply sharia rules have a better reputation and are considered more honest in disclosing financial statements than companies that do not apply sharia. Moreover, in Islamic sharia it is not allowed to lie or act dishonestly as Allah SWT says "and stay away from lying words" (QS. Al Hijj:30). But in fact, companies that apply sharia rules are not immune from fraud and manipulation of financial statements such as earnings management (Ibrahim et al., 2015). Moreover, in Islamic sharia it is not allowed to lie or act dishonestly as Allah SWT says "and stay away from lying words" (Surah Al Hijj:30). But in fact, companies that apply sharia rules are not immune from fraud and

manipulation of financial statements such as earnings management (Ibrahim et al., 2015). Moreover, in Islamic sharia it is not allowed to lie or act dishonestly as Allah SWT says "and stay away from lying words" (Surah Al Hijj:30). But in fact, companies that apply sharia rules are not immune from fraud and manipulation of financial statements such as earnings management (Ibrahim et al., 2015).

In fact, Islamic banks also practice earnings management, several previous studies such as Shawtari et al (2015), Arisandy (2015), Elnahass et al (2018), Illahi (2019), Fadhilah (2019), El-Halaby et al (2020) , Zainuldin & Lui (2020), Violeta & Serly (2020), who received the results of the entire study showing that Islamic banking also carries out profit management. The results of the research conducted by Shawtari et al (2015) which show that Islamic banks in Yemen also apply earnings management as is done in conventional banks, Islamic banks ignore their ethical identity as specified in Islamic law. Violeta & Serly (2020) conducted research related to earnings management in banking companies in Indonesia, the results of his research show that Islamic banks in Indonesia also practice earnings management. The case of earnings management that has occurred in Indonesia also occurred at Bank Muamalat Indonesia Tbk where there was a very significant increase in profit in 2018 compared to the previous year. Based on the monthly financial statements of December 31, 2018, Bank Muamalat posted a profit of Rp 112.6 billion. This figure has more than doubled compared to the 2017 achievement, which is IDR 50.3 billion. Until 2020, the publication report of Bank Muamalat as of the third quarter of 2019, the securities owned by the company were still recorded at Rp. 12.64 trillion and most of them are still asset swaps that are of concern to OJK because they are considered not in accordance with applicable regulations (Violeta & Serly, 2020). The case of earnings management that has occurred in Indonesia also occurred at Bank Muamalat Indonesia Tbk where there was a very significant increase in profit in 2018 compared to the previous year. Based on the monthly financial statements of December 31, 2018, Bank Muamalat posted a profit of Rp 112.6 billion. This figure has more than doubled compared to the 2017 achievement, which is IDR 50.3 billion. Until 2020, the publication report of Bank Muamalat as of the third quarter of 2019, the securities owned by the company were still recorded at Rp. 12.64 trillion and most of them are still asset swaps that are of concern to OJK because they are considered not in accordance with applicable regulations (Violeta & Serly, 2020). The case of earnings management that has occurred in Indonesia also occurred at Bank Muamalat Indonesia Tbk where there was a very significant increase in profit in 2018 compared to the previous year. Based on the monthly financial statements of December 31, 2018, Bank Muamalat posted a profit of Rp 112.6 billion. This figure has more than doubled compared to the 2017 achievement, which is IDR 50.3 billion. Until 2020, the publication report of Bank Muamalat as of the third quarter of 2019, the securities owned by the company were still recorded at Rp. 12.64 trillion and most of them are still asset swaps that are of concern to OJK because they are considered not in accordance with applicable regulations (Violeta & Serly, 2020). This figure has more than doubled compared to the 2017 achievement, which is IDR 50.3 billion. Until 2020, the publication report of Bank Muamalat as of the third quarter of 2019, the securities owned by the company were still recorded at Rp. 12.64 trillion and most of them are still asset swaps that are of concern to OJK because they are considered not in accordance with applicable regulations (Violeta & Serly, 2020). This figure has more than doubled compared to the 2017 achievement, which is IDR 50.3 billion. Until 2020, the publication report of Bank Muamalat as of the third quarter of 2019, the securities owned by the company were still recorded at Rp. 12.64 trillion and most of them are still asset swaps that are of concern to OJK because they are considered not in accordance with applicable regulations (Violeta & Serly, 2020).

This study discusses the indications of earnings management that may occur in Islamic banking companies in Indonesia in the period 2012-2020, researchers also relate the factors that can cause earnings management such as social responsibility reports which in Islamic companies are known as Islamic Corporate Social Responsibility (ICSR). The purpose of this study was to determine the relationship between ICSR and earnings management. ICSR in the Islamic context is the concept of corporate social responsibility with dimensions of Islamic economics, Islamic law, Islamic ethics, and Islamic philanthropy in accordance with the values of Islamic teachings contained in the Qur'an and Al-Hadith (Nasyirotun & Kurniasari, 2017).

Awareness of social responsibility in Indonesia can be seen from the many companies that disclose corporate social responsibility practices in the company's annual report (Nasution & Adhariani, 2016). The government responded quickly with the issuance of regulations regarding the obligation to disclose social and environmental responsibilities as regulated in Law no. 40 of 2007 concerning Limited Liability Companies which states that the annual report must contain a number of information, one of which is the report on the implementation of social and environmental responsibility (Widiastuti & Arifin, 2018). However, the facts show that in Indonesia there are still several Islamic companies that have not implemented and fully disclosed the implementation and disclosure of Islamic-based social responsibility. this is evident from the results of the ICSR content analysis in the study. Ananda & NR (2020) who found that almost all Islamic banks have not carried out ICSR properly and correctly, such as Mega Syariah bank in 2015 which only implemented the ICSR index as much as 15 of the 39 total indexes according to AAOIFI. This indicates that the implementation and disclosure of social responsibility has not been carried out optimally in Islamic banking in Indonesia.

Muhammad et al (2021) in their research revealed, Islamic Corporate Social Responsibility which is a form of social responsibility towards the environment and the surrounding community so that business continuity can be maintained, based on Islamic values will motivate investors to invest in companies that carry out responsible activities. Corporate social responsibility can indirectly be one of the company's strategies in an effort to improve the company's financial performance. In addition to financial performance, social responsibility disclosure also has a relationship with earnings management practices that may occur. There have been many studies that prove that earnings management practices and social responsibility reports have a strong correlation (Ibrahim et al., 2015). Investors will further increase their trust in companies that have carried out social responsibility activities and investors are very confident that through these activities, a company will have the opportunity to earn higher profits than companies that do not hold social responsibility. Therefore the company can get big profits which of course can increase the company's profits and the company's financial performance so that it will increase and grow.

Disclosure of social responsibility activities in the annual report on the other hand can make the financial information contained in the financial statements more clear and transparent. According to Quttainah et al (2015) corporate social responsibility is the reporting of social responsibility activities which for investors, consumers and other interested parties are general in looking at elements of transparency related to all aspects of the business. The annual report will be increasingly trusted by investors or those who use the report as a basis for making a decision. A socially responsible sharia company that expends effort and resources in selecting and implementing Islamic Corporate Social Responsibility practices in meeting the expectations of stakeholders in society,

Previous research conducted by Ibrahim et al (2015) attempted to examine the practice of earnings management and sustainability reporting, between the corporate sector offering Islamic financial products in Malaysia for the 2011-2013 period that included an Islamic perspective. The results of his research show that earnings management does not affect the quality of sustainability reporting, which shows that sustainability reporting is not manipulated to cover earnings management practices. Research also conducted by Andyani & Violita (2018) shows that there are indications of earnings management practices in Islamic banks in Indonesia. Then, his research shows that earnings management does not affect the quality of social responsibility reports. Alsaadi et al (2017) prove that companies that disclose CSR well and do not carry out sharia provisions tend not to be involved in earnings manipulation. Based on the results of previous studies, there are still inconsistent results regarding the relationship between ICSR and Earnings Management that may occur in Islamic banking companies, therefore this research is interesting to study.

The purpose of this study is to observe the ICSR disclosures made by Islamic banks and to examine the influence of Islamic corporate responsibility (ICSR) on earnings management and to see how earning management practices occur in Islamic banks in Indonesia. The test was carried out using smart pls, with a total sample of 81 samples. Earnings management is measured using discretionary accruals, ALLP and SPOSM, ICSR is measured by looking at the number of disclosures that refer to AAOIFI. The findings in this study indicate that ICSR disclosed in Islamic banking from year to year has increased and ICSR has no significant effect on earnings management, the results of this study also prove that Islamic banking in Indonesia also practices earnings management.

Literature Review

1. Agency Theory

The separation of owners and management in the accounting literature is called Agency Theory (Scott, 2015). Agency theory focuses on two individuals, namely the principal and the agent. The principal is the shareholder or owner of the company, while the agent is the management of the company that carries out the company's operational activities. Jensen & Meckling (1976) stated that the agency relationship arises because of a contract between the principal and agent by delegating some decision-making authority to the agent.

2. Stakeholder Theory

Stakeholder theory is generally defined as any group or individual that can influence or be affected by the company's operations and activities (Freeman & David, 1983). Freeman & David (1983) divide stakeholders into two, namely primary stakeholders and secondary stakeholders. Primary stakeholders are stakeholders who give influence and get direct influence by the strategy of the company. This group contains shareholders, owners, investors, employees or consumers, then secondary stakeholders are stakeholders who exert influence and get indirect influence by the company's strategy such as the government, the general public, and the environment.

3. Profit management

Earning management has several definitions, according to Scott (2015) earning management is: "Earning management is the choice by a manager of accounting policies or actions affecting earnings, so as to achieve some specific reported earnings objectives". This statement can be interpreted that earnings management is a choice made by managers in the selection of

accounting policies or actions that have an influence on earnings, so as to achieve several objectives in reporting earnings. Earning management is defined according to Schipper (1989) as "a deliberate management intervention in the process of determining earnings, usually to meet personal goals".

4. Legitimacy Theory

Legitimacy theory is a theory that explains the relationship between the company and the community where the company carries out its operations and uses available economic resources (Lindawati & Puspita, 2015). Gray et al., (1996) argue that legitimacy is a systems-oriented view of corporations and society that provides an opportunity for us to focus on the role of information, and disclosure in relationships between companies, countries, individuals and groups. This explanation indicates that legitimacy is a company management system that is oriented towards taking sides with the community, government, individuals and community groups. Because legitimacy is a system that puts the community forward,

5. Islamic Corporate Social Responsibility

Islamic Corporate Social Responsibility (ICSR) is a concept of corporate social responsibility that refers to Islamic economics, Islamic law, Islamic ethics, and Islamic philanthropy in accordance with Islamic values contained in the Qur'an and Al-Hadith (Adnan et al., 2014). Islamic Corporate Social Responsibility is one way to see the social activities and social responsibility of a company in supporting ongoing business activities that are in accordance with ancient values. The Islamic values in question are for example the disclosure of zakat or shodaqah carried out by the company, so it can be stated that in ICSR it is the social responsibility of the company or every Muslim, namely doing what is right and prohibiting or opposing something wrong (Farook et al., 2011).

Methods

The research subjects in this study are Islamic commercial banks registered in the Indonesian OJK data with an observation period of 2012-2021. The research object used is the annual report from 2012 to 2020. The population in this study is all Islamic Commercial Banks in Indonesia in 2012-2020 with a sample of 81. The approach used is a quantitative description analysis approach with explanatory research. The research design used is causal associative which in this study, researchers want to examine the effect of Islamic Corporate Social Responsibility on Earnings Management.

The dependent variable, namely earnings management, is measured using discretionary accruals (DA), ALLP and SPOSM, while the ICSR measurement in this study adopts the Islamic Social Reporting model developed by Haniffa which refers to AAOIFI. This disclosure consists of 5 main themes, namely funding and investment, products, employees, society, and the environment. From the 5 main themes, 38 sub-items were developed, which then calculated the ICSR disclosure index by dividing the number of items disclosed and the total number of disclosure items. The data analysis method used consists of several parts, the first of which is disclosure, meaning that if Islamic banking discloses the items contained in the index, it will be given a score of "1" and if the company does not disclose it will be given a score of "0". The second is descriptive statistical analysis consisting of Mean, Maximum Value, Standard Deviation, Variance, Sum and Range. The last is the Partial Least Square (PLS) analysis with several stages, namely designing a structural model (Inner Model), designing a measurement model (Outer Model),

making a path diagram, converting a path diagram into a system of equations, performing model estimation, goodness of fit or model evaluation. , model interpretation.

Findings

Descriptive statistics have the aim of providing an overview of the research variables. In this variable study, the variables studied include: Earning Management (discretionary accrual, ALLP, and SPOSM), Islamic Corporate Social Responsibility (Employees, Environment, Investment and funding, Products and services, Society) The results of descriptive statistical analysis are as follows:

Table 1
 Statistical Descriptive Analysis Results

Variable	mean	Min	Max	Standard Deviation
Discretionary Accrual	0.155	0.005	1.324	0.159
ALLP	0.001	0.000	0.014	0.002
SPOSM	0.704	0.000	1,000	0.459
Investment Funding	0.490	0.167	0.833	0.165
Products and Services	0.815	0.000	1,000	0.217
Employee	0.489	0.071	0.929	0.202
Public	0.657	0.000	0.909	0.167
Environment	0.380	0.000	1,000	0.328

Table 2
 Results of the Path Coefficient

	Path Coefficient	T statistic	P value
ICSR -> EM	-0.291	1,329	0.185

The table above can be formulated as follows:

The path coefficient which means that the effect of ICSR on earnings management with a negative path coefficient of -0.291 which means that every increase in ICSR will decrease the practice of earning management with a magnitude of effect of $-0.291 \times 100\% = 29.1\%$.

The effect of ICSR on earnings management with a p-value of 0.185 is greater than a significance level of 0.05. This means that H1 is rejected, thus it can be said that ICSR has no significant effect on earnings management.

The results showed that ICSR disclosure had no effect on earnings management. This is evident from the results of hypothesis testing in the path analysis equation which shows that the probability value of ICSR's influence on earnings management is -0.291 with a p-value of 0.185 which is greater than the significance level of 0,05. From this value, it can be interpreted that ICSR is not able to affect earnings management.

The results of this study are in line with research conducted by S. Sunarsih (2017) which in his research results proves that earnings management does not have a significant influence on the disclosure of social responsibility in companies listed in the Jakarta Islamic Index. S. Sunarsih

(2017) explains that the higher the earnings management practice in a company does not necessarily provide the maximum ICSR disclosure area and vice versa.

This study is also in line with the results of research from Pertiwi & Violita (2018) where the results of the research show that earnings management does not affect the quality of social responsibility reports (p-value 0.978). This proves that Islamic banks that disclose ICSR to the surrounding community are not due to earnings management actions. These results are in line with the research conducted by Tumewu and Arni (2014) which examined the effect of earnings management on the disclosure of social responsibility. This result is also in line with Ibrahim et al. (2015) who found that earnings management had no effect on the quality of sustainability reports.

Research conducted by Ibrahim et al. (2015) showed the same results as this study where the value of the relationship between disclosure of social responsibility and earnings management has a negative but not significant value. Ibrahim et al., (2015) in their research stated that although the Abnormal Accrual results showed a negative relationship with Quality of SR, it was not significant. The findings show that companies offering Islamic products and services do not engage in social activities to cover their involvement in earnings management. These results invalidate the notion made by Welford (1997), who believes that the corporate sector hides one problem by disclosing another,

The insignificant result between earnings management and social responsibility disclosure proves that companies that offer Islamic products and services and engage in sustainability initiatives do not do so to cover up their involvement in earnings management practices. Managers who have self-interest in the company generally have a tendency to profit through the implementation and disclosure of ICSR in order to get recognition for the manager's personal achievements. However, the results of this study do not show any support for the empirical relationship between ICSR disclosures and corporate managers' earnings management actions. It can also be because Islamic banking in Indonesia has not fully implemented sharia principles in accordance with Islamic teachings. Moreover, almost all Islamic banking in Indonesia is still a sharia business unit that must still refer to the parent company which is a conventional bank. In addition, the insignificance of the results of this study is also due to the many other factors that affect earnings management such as company performance, use of fair value, institutional ownership, government ownership and others.

Conclusion

The results of the analysis on the effect of Islamic corporate social responsibility on earning management, it can be concluded that the results of the ICSR variable test have no effect on earning management in Islamic commercial banks registered with the financial services authority in 2012-2020. This indicates that ICSR has not been able to influence earnings management in Islamic banking companies. This means that the disclosure of ICSR is only limited to building a company image that Islamic banking has carried out social programs to the Indonesian people, even though in fact the practices that are prohibited by sharia are still carried out such as earning management practices.

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WORKING FROM HOME AND PRODUCTIVITY DURING THE COVID-19 PANDEMIC: A CASE STUDY IN THE IMMIGRATION DIVISION, WEST JAVA REGIONAL OFFICE, MINISTRY OF LAW AND HUMAN RIGHTS INDONESIA

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ABSTRACT: The COVID-19 Pandemic has led to economic and social disruption worldwide. Many countries, including Indonesia, face challenges, especially regarding the changes in working. Additionally, the Indonesian Government administers social distancing measures, including implementing the Work From Home (WFH) practice. At the West Java Regional Office - Ministry of Law & Human Rights, challenges that could impact the employees' productivity are identified, particularly in the Immigration Division, as its departments have different work requirements. Therefore, this study aims to analyze the relationship of WFH practice with employees' productivity. Simple Linear Regression Analysis and Cross-Tabulation Analysis were conducted to analyze the relationship, and SWOT Analysis was utilized as the basis on the continuity of WFH. Results of the analysis indicate a strong correlation and linear relationship between the variables. Nonetheless, the productivity during WFH could be optimized by implementing a Change Management Strategy to assist the employees in immersing themselves in change.

Keywords: Work From Home, Productivity, Simple Linear Regression Analysis, Cross-Tabulation Analysis, SWOT Analysis

INTRODUCTION

Since March 2020, the COVID-19 pandemic has led to economic and social disruption worldwide, where many countries face challenges in the public health system, food system, and world of work (Chriscaden, 2020). In Indonesia, the first two confirmed cases of COVID-19 were announced by President Joko Widodo on March 2nd, 2020, where it is followed by the implementation of national social distancing measures that encourage people in Indonesia to work, study, and worship at home and postpone any activity (WHO Indonesia, 2020).

As the acute situation in West Java, Indonesia, continues due to the rise of virus transmission, the Government administers social distancing measures with various levels of strictness depending on the area's latest condition. Even though there's a constant change in the details of the social distancing measures, in general, the people of West Java are required to conduct their activities at home, including work.

The implementation of PPKM dramatically affects the way of working, which also applies to the operational activities in the Ministry of Law & Human Rights of West Java. For instance, the Immigration Division is divided into two departments: the Immigration Intelligence & Enforcement Department, which requires the employees to work from the office; and the Immigration Licensing & Information Department, where it is still feasible for their employee to

conduct their working activities from home. Thus, the Immigration Division will have to adapt to the new and different ways of working with this arrangement (Kemenkumham Jabar, 2021).

Before the pandemic, Work From Home (WFH) practice was not considered the primary way of working for civil apparatus, especially in the Immigration Division. The practice was unclear and often debated as to how it affects the productivity measures of the workforce. However, the pandemic has forced many industries to apply the WFH practice. Some companies have even announced that WFH or “Working from Anywhere” will still be applied in post-pandemic circumstances. In addition, there’s no knowing when the pandemic will end, which still put WFH as the primary option as the new normal to avoid fast virus transmission. Hence, WFH practice is still an urgent and critical topic to be analyzed thoroughly.

To conclude, with the debate on the effectiveness of WFH practice, and how the productivity of its workforce will depend on the nature of the work tasks itself, the Author will be taking the Immigration Division of the West java Ministry of Law & Human Rights as its subject of deep analysis towards WFH practice and its relationship to the employees’ productivity, and whether it will still be suitable to be conducted in a post-pandemic circumstance.

LITERATURE REVIEW

As the COVID-19 pandemic has been going on since 2020, it has changed the ways of working globally and made WFH the favored solution to keep daily business activities surviving. However, like many changes, the WFH practice is still being analyzed globally on how it affects the employees in general. For example, it has been found that WFH has not proven to be the best option, although highly favorable for the workforce in Hong Kong. The SWOT analysis indicated that this is due to the lack of resources and guidance for the implemented change of WFH (Lina Vyas & Nantapong Butakhieo, 2021).

Some findings conclude there’s a decline in productivity for workers who worked from home compared to those who did not in Japan. It was suggested that it was because the pandemic forced the employees to implement the WFH policy without preparation beforehand (Kitagawa R et al., 2021). In addition, another study has found that most of its respondents’ working productivity was lower during WFH arrangements than in their usual workplace. The results showed that those who started WFH arrangement earlier had higher productivity. The WFH productivity gap between early and later adopters reflects both selection mechanisms and learning effects (Morikawa M, 2020).

METHODOLOGY

Sampling

For this research, the Author will be using a quantitative and qualitative method. The quantitative will be based on an Online Employee Survey that will be distributed to the whole Immigration Division with 26 employees as the population. Following the online employee survey, the methodology used for the data will be Simple Linear Regression to understand the relationship between WFH practice and productivity, and Cross-tabulation for an in-depth descriptive analysis.

Subsequently, the qualitative method will be based on the Interview Session with selected respondents of 11 employees as the sample. The interview respondents will include seven structural positions (executive level) and four staff levels. The data retrieved based on the Interview results will be utilized as supporting data and to conduct SWOT analysis to recommend the

continuity of implementing the Work From Home practice that includes the post-pandemic situation.

Data Collection

The data for the quantitative method that comprise of the Simple Linear Regression and Cross-tabulation analysis will be collected from the Online Survey that is made up of four dimensions: “General Information”, “WFH Arrangement”, “Productivity during WFH Arrangement”, and “Working dynamic during WFH Arrangement”.

The General Information Dimension will include questions regarding: (1) position title, (2) gender, (3) age, (4) domicile, (5) question on whether the respondent implement the WFH practice and the time on when the WFH practice started, (6) question on the time spent on commuting if the respondent had to conduct WFO practice, and (7) question on the frequency of the WFH practice per week

As for the Productivity during WFH Arrangement Dimension, question design include: (1) question on their productivity rate during WFH, (2) question on their productivity rate on WFO compared to during WFH, (3) question on the factors that negatively impact their productivity during WFH practice, and (4) question on the factors that positively impact their productivity during WFH practice.

In addition, the question design in the Working Dynamic during WFH Arrangement Dimension is made up of: (1) question on their subordinates’ productivity rate on WFH, (2) question on their subordinates’ productivity rate on WFO compared to during WFH, (3) question on the factors that negatively impact their subordinates’ productivity during WFH practice, (4) question on the factors that positively impact their subordinates’ productivity during WFH practice, and (5) question on the most effective way to monitor their subordinates’ productivity during WFH arrangements.

As for the Interview, it will be conducted in a formal manner. Interview protocol has been prepared such as obtain permission through formal letter from institution, establish interview schedule, obtain consent for recording interview conversation, and prepare question guideline as a script. The Question Design consist of: (1) question on the applied WFH Mechanism, (2) question on the responsible parties of arranging the WFH Mechanism, (3) question on the task changes during WFH, (4) question on the readiness of infrastructure (ICT) during WFH, (5) question on the communication dynamic during WFH, (6) question on the benefits obtained during WFH, (7) question on the challenges faced during WFH, (8) question on feedback in order to enhance the WFH mechanism in the Immigration Division, (9) question on the respondent’s productivity rate on during WFH, (10) question on factors that affect the productivity level during WFH, (11) question on applied mechanism to monitor employees’ productivity during WFH, (12) question on feedback that can help improve respondent’s productivity during WFH, (13), question on respondent’s preference in monitoring their subordinates’ productivity during WFH (14) question on feedback that can help improve the subordinates’ productivity during WFH, and (15) question on feedback that can help improve the mechanism for monitoring subordinates’ productivity during WFH.

Measures

Simple Linear Regression and Cross-tabulation have been commonly used and previously used to conduct research related to Work From Home and productivity, such as “Productivity of Working From Home during the COVID-19 Pandemic: Evidence from an Employee Survey” (Morikawa M, 2020). In addition, the Author will also be conducting a SWOT analysis as the supporting analysis, which has been done in previous related research such as “The Impact of Working From

Home During COVID-19 on Work and Life Domains: An Exploratory Study on Hong Kong” (Lina Vyas & Nantapong Butakhieo, 2021),

As for the Simple Linear Regression, the mathematical equation can be expressed as the following:

$$y = mx + c$$

Description:

- y = dependent variables (productivity)
- x = independent variables (WFH)
- gradient m = rate of change
- y -intercept c = starting value

The independent variable would be “Work From Home,” and the dependent variable would be “productivity”. In addition, the research will utilize alpha (α) of 0,05 as the indicator to reject or accept the null hypothesis.

Hence, the hypothesis for the research are:

- H_01 = There is no linear relationship between Work From Home and Productivity
- H_{a1} = There is a linear relationship between Work From Home and Productivity
- H_02 = The intercept or slope = 0 (WFH is not a significant variable that impacts Productivity)
- H_{a2} = The intercept or slope \neq 0 (WFH is a significant variable that impacts Productivity)

FINDINGS

Online Survey Results

Based on the online survey results, the majority of the employees conducted two and three days of Work From Home practice per week, with each percentage of 35%. Subsequently, the rest of the employees of 15% of the respondents conducted one day of WFH practice per week.

In addition to the frequency of WFH practice, the online survey results showed that the majority of the employees prefer WFH practice to 58% than WFO practice. This result indicates that more than half of the employees in the Immigration Division have been in favor of keeping the new ways of working since the COVID-19 Pandemic started.

From WFH practice, the most significant benefit that affects their productivity is saving time by not commuting to the office. However, like any changes, respondents still experience factors that negatively impact their productivity during WFH, such as tasks that are not suitable to be conducted at home even though rules and regulations do not require it. The negative factor indicates that there is still room for improvements in implementing the WFH practice in the Immigration Division.

To dig further into the results of the online survey on the impact of WFH implementation in the Immigration Division, the Author provides descriptive quantitative on the questions where the respondents have to assess and rate their own experience with the different ways of working (scale 1-5, 5 is the best). The experiences include readiness level of WFH implementation, convenience level during WFH implementation, productivity during WFH practice, and productivity during WFO practice.

Table 1. Descriptive Quantitative Assessment on Ways of Working

Category	Readiness Level of WFH	Convenience Level during WFH	Productivity during WFH	Productivity during WFO
Mean	4,462	3,692	3,5	4,462
Median	5	5	4	5
Mode	5	5	5	5
Standard Deviation	0,948	1,828	1,727	0,647
Sample Variance	0,898	3,342	2,98	0,418
Minimum	1	0	0	3
Maximum	5	5	5	5
Sum	116	96	91	116
Count	26	26	26	26

To summarize the results from the descriptive quantitative findings of the Online Survey, the respondents obtained a positive experience during the WFH implementation, which is reflected through the positive scales of readiness and convenience level of above the scale of three. Furthermore, the respondents also show relatively good productivity results during their WFH practice, even though their scale of productivity level is better during WFO practice. The results of productivity level during WFH suggest that even though the prior findings shows the majority of respondents are in favour of WFH practice, additional initiatives are needed to improve their productivity level during WFH practice in the future so that it can match up to the standards during the previous way of working.

Interview Results

As for the result of the Interview, most of the employees have only started the WFH practice since the COVID-19 pandemic where all the employees are impacted by the change of tasks execution. However, the Intelligence & Enforcement Department experienced a more significant change than the Immigration Licensing & Information Department since the work required them to conduct direct surveillance and technical evaluation of the nine Immigration Technical Implementation Units. Several alternatives have been conducted, such as coordination with the Immigration Technical Implementation Unit as regular meetings through Zoom and WhatsApp applications. However, with the best effort that they have made, optimization of productivity during WFH practice is still required to live up to the previous ways of working standards.

Additionally, despite the benefits the employees have received through the WFH practice, the result implied that the working dynamics within the Immigration Division still require a better communication structure during WFH. This was indicated through several feedbacks that convey the need to increase individual initiatives and commitment during WFH as it comes down to the responsibility of personal motivation to adapt to the WFH changes. Hence, a Change Management strategy could be helpful in enabling beneficial change of new ways of working to optimize employee's performance and minimize adverse outcomes.

Simple Linear Regression Analysis

To complete the research on the impact of Work From Home practice, especially the relationship with the productivity of the employees in the workplace, Simple Linear Regression Analysis is conducted with the result as below:

Table 2. Summary Output of Simple Linear Regression Results

<i>Regression Statistics</i>	
Multiple R	0,854923976
R Square	0,730895005
Adjusted R Square	0,719682297
Standard Error	0,913973061
Observations	26

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	54,45168	54,45168	65,18452	2,68E-08
Residual	24	20,04832	0,835347		
Total	25	74,5			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0,902013423	0,368339	2,448866	0,022013
Frequency of WFH (day/week)	1,37852349	0,170743	8,073693	2,68E-08

Using the Simple Linear Regression Method to analyze the significance and relationship between the Productivity and the Work From Home variables, the results show a strong correlation and linear relationship between Work From Home and Productivity, where the linear regression model is significant. The result implied that in every unit increase in Productivity is related to the increase of the Work From Home variable. Hence, it shows that overall, the productivity of the employees' in the Immigration Division of the West Java Regional Office of the Ministry of Law and Human Rights of Indonesia is positive during Work From Home implementation.

Cross-Tabulation Analysis

As the research has discovered a strong correlation and linear relationship between Work From Home and Productivity, a further breakdown is conducted through the Cross-Tabulation Analysis to elaborate on the collected data. The elaborated findings are explained as follows:

Table 3. The prevalence of preference for WFH practice by age

Prefer WFH than WFO	26-41 years old	42-57 years old	>57 years old	Total	P-Value (<0,05)
Yes	39%	11%	8%	58%	0.0023
No	-	30%	12%	42%	
Total				100%	

The prevalence of preference for WFH practice by age reflected that the majority of 58% of the employees in the Immigration Division who preferred the WFH practice belong to the millennial

age group of 26-41 years old. The P-Value also indicates a significant relationship between the preference and the age group.

Table 4. The prevalence of convenience level of WFH practice by commute time

Level of Convenience	<30 minutes	30-45 minutes	45 minutes – 1 hour	>1 hour	Total	P Value (<0,05)
Very Convenient	15%	23%	8%	8%	54%	0,0337
Convenient			12%		12%	
Neutral	12%		4%		15%	
Not Convenient	4%				4%	
Not available	15%				15%	
Total					100%	

Furthermore, the level of convenience of WFH practice is significantly determined by the commute time, as it was also validated from the Interview and Online Survey results that the most significant benefit of WFH is saving time due to no commuting required.

SWOT Analysis of Work From Home Practice

Based on findings from the Interview Results, the Author can conduct a SWOT analysis that could be useful as a reference for future recommendations.

Table 5. SWOT Analysis

<p style="text-align: center;">Strengths</p> <ol style="list-style-type: none"> 1. Save time because no commuting is required 2. Flexible arrangement of work hours 3. Reduce operation costs from office facilities (electricity/ snacks / etc.) 	<p style="text-align: center;">Weaknesses</p> <ol style="list-style-type: none"> 1. Inadequate working environment (may include nature of tasks and limited infrastructure support) 2. Supervision and communication barriers 3. Indistinct boundaries between work and personal life Lack of initiative and ownership of tasks when assigned at home
<p style="text-align: center;">Opportunities</p> <ol style="list-style-type: none"> 1. No location boundaries to recruit talents anywhere from all over the world 2. Could provide an option for hybrid working arrangements 3. Promote innovation and agility (e.g. technology enhancement for WFH infrastructure) 	<p style="text-align: center;">Threats</p> <ol style="list-style-type: none"> 1. Higher risks of cybersecurity 2. Higher exposure to private data due to access out of the working place 3. Unclear working dynamic because there's no established universal WFH policy and regulations yet

Even though WFH implementation has comprised its own benefit, there's no denying that challenges to the implementation should be tackled if the Immigration Division still has to conduct WFH practice in the future. Whether or not the pandemic will still exist in the days to come, it is still crucial for the Immigration Division to tackle its WFH implementation weaknesses and threats

to build an agile organization, especially with other discourse on changes of ways of working from the Government such as “Work from Anywhere”,

Hence, the Immigration Division should establish clear and structured rules and provisions as an in-depth guideline that can address weaknesses and threats to optimize readiness and productivity during WFH practice. These changes in rules can be implemented through Change Management Strategy.

CONCLUSION

By conducting Simple Linear Regression Analysis, Cross-tabulation Analysis, and SWOT Analysis based on the Online Surveys and Interview results, it has been found that there's a linear and positive relationship between the Productivity and Work From Home practice in the Immigration Division of the West Java Regional Office of the Ministry of Law and Human Rights of Indonesia. However, for future improvement of the Work From Home practice to optimize employees' productivity, several rules and provisions must be established as an in-depth guideline for the employees along with the Change Management Strategy.

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REGIONAL INEQUALITY CONCERNING INVESTMENT, HUMAN RESOURCES, AND NATURAL RESOURCES DISTRICT/CITY IN THE PROVINCE OF SOUTH SUMATRA

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Abstract: This study uses panel data analysis. The research data used is secondary data from 17 districts/cities in South Sumatra Province. Data processing uses panel data regression from 2010 to 2020 with statistical data processing tools. The variables in this study are investment, human resources, and natural resources as independent variables, while regional inequality is the dependent variable. This study aims to determine the effect of investment variables, human resources, and natural resources on regional inequality. The results of this study are investment variables affect inequality, human resource variables affect inequality, natural resource variables affect inequality.

Keywords: Inequality, Investment, Human Resources, Natural Resources

INTRODUCTION

In the implementation of economic development, high growth is the main target for developing countries. Economic growth that occurs during a certain period cannot be separated from the development of each sector or sub-sector that contributes to the added value of the economy of a region. High economic growth still leaves problems that must be faced in the development of a region. The government's role is very important in increasing economic growth because it includes providing public needs to the community that cannot be provided by other private parties. It is stated that economic growth is an indicator of the success of the economic development process. To be able to increase economic growth, the government's role is needed in terms of increasing employment and regulating government spending to minimize regional inequality.

Inequality between regions is caused by the mobilization of resources owned by a region. These resources include the accumulation of capital, labor, and natural resources owned. The existence of heterogeneity and various characteristics of a region causes a tendency for inequality between regions and between economic sectors of a region to occur. Some of the main factors that cause inequality between regions, namely, differences in the content of natural resources, differences in demographic conditions, lack of smooth mobility of goods and services, the concentration of regional economic activities, and allocation of development funds between regions. The concentration of economic activity in only a certain area directly has an impact on regional income disparities which vary widely. One region can provide high income, on the other hand, other regions provide relatively low income.

The main impact of regional inequality is unemployment, poverty, and the low quality of human resources. This impact is a derivative impact of the lack of employment in the area concerned, which is caused by a lack of investment from both the government and the private

sector and results in unemployment. If unemployment occurs, it is usually followed by poverty. Poverty causes the quality of human resources (the next generation) to tend to be low, due to the limited ability to enjoy education due to low incomes and even none at all, so that people focus more on meeting the most crucial needs, namely food and drink. Regional inequality is often a serious problem and if it cannot be handled carefully it will lead to more complex crises such as population, economic, social, political, environmental issues and also in a macro context can harm the development process that a region wants to achieve. Developed regions continue to leave underdeveloped regions and the presence of non-leading sectors is a burden. In Indonesia itself, it can be seen that there are developed and less developed regions as a result of these differences.

Regional government expenditures, both provincial and district/city expenditures reflected in the APBD are divided into two main groups, namely routine expenditures or regional apparatus expenditures and development expenditures or public service expenditures. Of the two types of expenditure, routine expenditure or regional apparatus expenditure is the dominant type of expenditure in development expenditure in most regions, both in the province of South Sumatra and in most regions in Indonesia. Routine expenditures or regional apparatus expenditures include personnel, goods, maintenance, official travel, loans along with interest and subsidies. All of these types of expenditures are consumption expenditures. Meanwhile, development expenditures or public service expenditures are divided according to development sectors which are more of an accumulation of capital stock.

The development of the provinces since the 2000s on the island of Sumatra and decentralization has also had an impact on pushing the inequality between provinces to be wider. Therefore, by looking at the differences in the economic growth of each province that causes inequality between regions to be uneven, this study is expected to be able to review how big the inequality is in various provinces in South Sumatra. To ensure the implementation of human development, particularly in the form of direct investment in human capital, several growth models have been developed. The neoclassical model generally emphasizes the provision of labor, capital stock, and technological change in the process of economic growth, which then develops into human resources in economic growth. The resources used are not only human resources in the context of meeting the needs of economic growth, natural resources are also a factor in the economic growth of a region, besides that natural resources can affect inequality between regions, not all regions have wealth. abundant and equal natural resources.

The improvement of the national economy must be oriented towards the implementation of development in other sectors, such as natural resources which include agriculture, plantations, marine, and the mineral resources sector. Some of these sectors aim to improve the welfare and prosperity of the people, as well as reduce inequality between regions because each region has superior natural resources. Opening access to the development is expected to increase economic growth starting from the community according to the conditions of their respective regions. This idea of economic improvement is in line with the enactment of a law on regional government, namely regional autonomy and financial decentralization between the central government and regional governments. Natural resources in the province of South Sumatra are dominated by the oil and gas sector, plantations, and agriculture. From these three things, the implementation of regional autonomy will run well.

LITERATURE REVIEW

Inequality

Inequality is a phenomenon that occurs in almost all layers of the world, be it poor countries, developing countries, or developed countries, the only thing that distinguishes them is the magnitude of the level of inequality, therefore inequality cannot be eliminated but can only be suppressed to the limit that can be tolerated (Sukwika, 2018; Kuncoro, 2013). The increase in per capita income does indicate the level of economic progress of a region. However, the increase in per capita income does not always indicate that the income distribution has been evenly distributed. Often in developing countries, the economy emphasizes the use of capital rather than the use of labor so that the benefits of the economy are only enjoyed by some people. The concentration of economic activity in only a certain area directly has an impact on regional income disparities which vary widely. One region can provide high income, while the other region provides relatively low income. In turn, all of this will have an impact on the regional ability to grow and develop in the future (Fleisher, Li, & Zhao, 2010).

The main impact of regional inequality is unemployment, poverty, and the low quality of human resources. This impact is a derivative impact of the lack of employment in the area concerned, which is caused by a lack of investment from both the government and the private sector and results in unemployment. If unemployment occurs, it is usually followed by poverty. Poverty causes the quality of human resources (the next generation) to tend to be low, due to the limited ability to enjoy education due to low incomes and even none at all, so that people focus more on meeting the most crucial needs, namely food and drink.

Human Resources

Labor is any man or woman who is in and/or will do work, both inside and outside the employment relationship in order to produce goods or services to meet the needs of the community (Soebagyo, 2013). In terms of population as a factor of production, not all residents can act as a factor of production. Only the population in the form of labor can be considered as a factor of production. The workforce is the population of working age between 15 to 64 years (Irawan & Suparmoko, 2008; Nafziger, 2012). A larger number of workers means an increase in the level of production, while a larger population growth means a larger size of the domestic market. However, it is still questionable whether it is true that the rapid rate of population growth will have a positive or negative impact on its economic development. According to Irawan and Suparmoko (2008), labor includes people who are already or are working, are looking for work, and doing other activities, such as going to school and taking care of the household. The demand for labor is the need that has been based on the willingness to pay certain wages in return. The employer intends to use or request several employees with a willingness to pay a certain amount of wages each time. So this request has taken into account the high and low wages prevailing in the community, or those paid to the workers concerned (Soebagyo, 2013); Notowidigdo, 2019).

Natural Resources

The definition of natural resources according to Soerianegara (1977) is the result of a human assessment of the elements of the environment that they need, where there are three definitions of natural resources, namely total supply, resources, and reserves. Furthermore, Soerianegara (1977) also revealed that natural resources, in general, are the state of the environment

and raw materials used by humans to meet their needs and improve their welfare. In general, there are two types of natural resources. These are renewable natural resources and non-renewable natural resources. Renewable natural resources can be used continuously without fear of running out, for example, water, soil, air, sunlight, geothermal, animals, and plants. Meanwhile, non-renewable natural resources are limited in number and may run out if used continuously, for example, oil, minerals, natural gas, various metals, and other mining materials.

Investment

The investment obtained by each region is also different, investors will first see the potential of an area, both in terms of natural resources and other things such as tourism, labor. Investment according to Indrawati (2012) and Terra (2008) is an investment in an activity that has a relatively long period of time in various business fields. The investment that is invested in a narrow sense is in the form of certain projects, both physical and non-physical, such as projects for the construction of factories, roads, bridges, building construction, and research and development projects. Investment is a term with several meanings related to finance and economics. The term relates to the accumulation of a form of the asset with an expectation of obtaining a profit in the future (Harrison & Rodríguez-Clare, 2010).

Research Methods

This study uses panel data from 17 districts/cities in the province of South Sumatra from 2010-2020.

Regression equation model of the effect of regional inequality on investment, human resources and natural resources.

$$KP = \beta_0 + \beta_1 I + \beta_2 E + \beta_3 N + \varepsilon \dots\dots\dots (1)$$

β_0 , β_1 , β_2 and β_3 is the parameter to be estimated and is the error term of regional inequality.

Description:

β_0 = Constanta

KP = Inequality

I = Investment

E = Human Resources

N = Natural Resources

The data used is secondary data. Secondary data is data that comes from records in other sources that have been collected by certain parties (Sekaran & Bougie, 2013).

RESULTS

Regression measurement in this study uses panel data regression analysis, which is a combination of time series and cross-section, the following table of statistical test results using panel data.

Table 1
 The effect of Investment, Human Resources and Natural Resources on Inequality

Variable	t-Statistic	Prob.
C	-7.8612	0.0000
INVESTASI	-10.2433	0.0000
SDM	16.3083	0.0000
SDA	9.9066	0.0000

Source: Processed data, 2021.

1. Investment affects Inequality

The investment obtained by each region is also different, investors will first see the potential of an area, both in terms of natural resources and other things such as tourism, labor. investment creates income which is the impact of investment demand, and second, investment increases the production capacity of the economy by increasing the capital stock which is the impact of investment supply. This study is following research from Nursini (2006) to develop a study on the relationship between fiscal policy, economic openness and economic growth in Indonesia during the 1974-2003 period. HR and R&D investments have a positive and significant impact on economic growth and inequality, both financed from taxes and foreign debt, while routine spending and infrastructure investment do not significantly affect economic growth.

2. Human Resources affects Inequality

A larger number of workers means an increase in the level of production, while a larger population growth means a larger size of the domestic market. However, it is still questionable whether it is true that the rapid rate of population growth will actually have a positive or negative impact on its economic development. This research is the same as that of Kusreni (2009) who developed a study entitled the effect of changes in economic structure on sectoral and regional specialization and the structure of sectoral labor absorption in East Java. Sectoral workers have a significant positive effect on inequality that occurs due to sectoral specialization.

3. Natural Resources Affect Inequality

Ownership of natural resources certainly has an impact on the economy, regions rich in natural resources will get additional regional income from the oil and gas and non-oil and gas sectors. This research is in line with the results of Agusalim's research (2016). One of the results of his research is that all macroeconomic variables including government spending, growth of human resources, and natural resources have an influence on inequality that results in poverty between regions.

CONCLUSION

Investment variables, human resources, and natural resources influence inequality. Inequality between regions is caused by the mobilization of resources owned by a region. These resources include the accumulation of capital, labor, and natural resources owned. The existence of heterogeneity and various characteristics of a region causes a tendency for inequality between regions and between economic sectors of a region to occur.

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THE OBSERVATION ANALYSIS ON THE STOCK PRICES OF BBRI WITHIN PERIOD OF 2018-2021

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Abstract : BRI is one of the institutions that consistently contributes in increasing GDP or Indonesia's economic growth. One of these contributions is by providing investment services through capital market in the form of mutual funds or stock sales. In 2021, BRI recorded a solid performance despite the challenging conditions due to the pandemic of Covid-19. BRI's external conditions also affect the stock prices, such as the trade war between the US and China, Brexit, the pandemic of Covid-19, and the new variant of Covid-19 which also had an impact on the development of BRI's stock prices. The recovery of global economic in 2021 can be seen when the economic activity has increased, which can be identified from the expansionary rate of Purchasing Managers Index (PMI) of the manufacturing and services. This research activity employed descriptive quantitative research, which is used to describe both external and internal factors that affect BRI stock prices.

Keywords : *Stock Prices, BBRI, Pandemic of Covid-19*

INTRODUCTION

As one of the developing countries, Indonesia certainly strives to continue to increase economic growth through various sectors. In order to improve and meet the needs of the economy, the country also needs a lot of capital or the cost of activities that can increase economic growth itself. Generally, a country's capital is obtained from the level of community productivity in the form of Domestic Gross Income (GDP) and abroad.

According to Sukirno (2011), Gross Domestic Product is the result of production by citizens themselves or foreigners in a country and in a certain period. From this GDP result, it continues to increase every year. In line with economic growth, one of the sectors that also influences and participates in growth is the banking sector. This is related to financing activities carried out by banks to support the macro and micro economics owned by the community to increase Gross Domestic Product. One of these banks is a bank owned by the government, namely Bank Rakyat Indonesia (BRI).

BRI is one of the institutions that consistently contributes in increasing GDP or Indonesia's economic growth through several economic activities. BRI have been evenly distributed throughout Indonesia. Established since 1946 in accordance with Government Regulation No. 1 Article 1 which stated that BRI is legal as the first Government Bank in Indonesia. In line with this status, BRI continues to carry out the duties in accordance with its Motto, namely

"Serving with a Sincere Heart" and its vision of "A leading and open bank that always prioritizes the satisfaction of all customers throughout Indonesia". As a form of supporting customers to increase the country's economic growth, one of the economic activities carried out by BRI is the development of the capital market business as a variety of financial solutions. In recent periods of time, it can be seen that the performance of the capital market in Indonesia has continued to crawl up steadily. Moreover, in recent years, people's financial literacy and capital markets have become sharper. Thus, public awareness to invest and use banking products is getting bigger.

As we know that the capital market is a form of assistance from the community to an institution or institution in the form of business development funds through investment. This investment also helps Indonesia's economic growth because it can help running a business, or increase working capital and invite the public to understand the importance of investing. From this capital market, people can also choose investment and profit programs according to the specified tempo or time period. The capital market has a wide range of products offered through various platforms, as well as directly through banking. Companies or institutions that need investment assistance, can sell instruments for financiers by issuing shares or debt securities. This instrument then can be purchased by the public, or financiers as a form of futures investment.

Banking is one of the main keys in the preparation of the country's economic system through its role as an institution with the authority to distribute funds aid to units or institutions in need. Therefore, BRI as one of the state-owned banks also provides various kinds of investment services through the capital market in the form of mutual funds and stock sales. Moreover, with the increasingly sophisticated technology and information today, people's interest in investing in the past years is quite growing (Malini,2021). For example, in the last three years there has been a very significant difference in the pace of development of public investment in BRI. This difference can be observed before and after the pandemic that lasted in recent years. Pandemic conditions like this also affect the condition of the share price sold by Bank Rakyat Indonesia. In 2018, stock price movements experienced a decrease and a fluctuating increase.

In the final quarter of 2018, BRI's shares were valued at Rp.3,660,-. It experienced an increase after occupying the lowest share price in the previous quarter. In 2019, BRI shares continued to crawl up with the highest share price in the third quarter reaching Rp.4,400,-. In 2020, the ongoing pandemic had a very significant impact on stock prices. Throughout the year, the stock price plummeted, especially in the second quarter or the beginning of the pandemic, whose share price only reached Rp.2,170,-. As the pandemic subsided, stock prices continued to rise. After going through a difficult year in 2020, at the opening of the second quarter of 2021, the share price has risen to Rp.4,293,-. This is because economic factors during the pandemic have begun to recover. Also, the role of banks or BRI has also begun to return to normal, so that capital market traffic has improved. Therefore, this research is crucial to be conducted considering to observe the shares of Bank BRI during the period of 2018 to 2021 to find out the dynamics of stock price movements within those periods.

LITERATURE REVIEW

Financial investment is common in today's digital age and the capital market is a forum for capital owners to carry out their investments. According to research conducted by Sinaga and Sulasmiyati (2017), decision making in investing is to understand the pattern related between

returns and risks of an investment. The capital market performs two functions, namely as a means for business funding and a forum for the public to invest (Sambuari, 2020). The capital market is an economic tool, inseparable from various environmental influences on the course of the capital market in the economic context or outside the economic context (Hengky et al, 2014). Influences outside the economic context can be in the form of social issues, even those that are shocking occur, called the pandemic of Covid-19. It can be concluded that stock investment in the capital market has many things that affect both issues, information, and even disasters (Malini, H., & Giovandi, H. 2022).

According to Fhadoil (2020), Indonesian banking stocks have greater return than the expected return, this is why banking stocks are the efficient stocks during pandemic, and also the return is directly proportional to the level of risk. The more of the return, the more risk will be faced, and otherwise, the small of the return, the small risk will be faced, this shows similarities with the guidelines of the Capital Asset Pricing Modeling (CAPM) method.

Based on the research conducted by Julyanti (2021) using the Markowitz method showed that not all of the stocks have poor performance during the pandemic when it all compared to the performance of risk-free/low-risk instruments. And based on the difference in performance between the optimal portfolio with risk-free/low risk instruments and the JCI, it can be concluded that the excess return between the optimal portfolio, the risk-free/low risk instrument and the JCI during the pre-pandemic, post-pandemic, and overall period is not significant, while cumulative excess return between optimal portfolio, risk-free/low risk instruments and JCI during the pre-pandemic and post-pandemic period is significant, but overall, the cumulative excess return period between optimal portfolio and risk-free/low risk instruments is significant but the cumulative excess return between optimal portfolios with the JCI instrument is not significant.

Basically, there are two advantages that investors get by buying or owning shares, which can be in the form of receiving dividends and capital gains. Dividends are the distribution of profits provided by the company and come from the profits generated by the company. Dividends are given after obtaining approval from shareholders in the GMS. If a financier wants to get dividends, then the financier must hold the shares for a relatively long period of time, namely until the ownership of the shares is in the period when they are recognized as shareholders who are entitled to dividends. Dividends distributed by the company can be in the form of cash dividends, meaning that each shareholder is given a dividend in the form of cash in a certain amount of Rupiah for each share or it can also be in the form of a stock dividend which means that each shareholder is given a dividend of a certain number of shares so that the number of shares owned by a financier will increase with the distribution of the share dividend. Meanwhile, Capital Gain is the difference between the purchase price and the selling price. Capital gains are formed in the presence of stock trading activity in the secondary market. For example, investors buy ABC shares at a price per share of Rp.3,000,- then sell them at a price of Rp.3,500,- per share which means that the financier gets a capital gain of Rp.500,- for each share he sells as an investment instrument, stocks have risks, including capital loss and liquidation risk.

Capital loss is the opposite of Capital Gain, which is refer to a condition where investors sell shares at a lower price than the purchase price. According to Suputra (2020) in a comparative risk analysis study of banking stocks before and during the pandemic crisis, during the pandemic, LQ45 stocks had a smaller risk loss compared to the pre-pandemic period and to the daily average

share price. Based on this research study, in 2020 the stock price had a significant decline from the middle to the end of the year, which is fair for a significant capital loss to occur if the share capital before the pandemic was compared to the conditions during the pandemic. For example, assume that BBRI shares are purchased by investors at a price of Rp.4,400 per share, then the share price continues to decline until it reaches Rp.3,610,- per share. Fearing that the share price will continue to fall, the investor then sell it at the price of Rp.3,610,- resulting in a loss of Rp.790,- per share.

A company whose shares are owned declared bankrupt by the court, or the company is dissolved. In this case the right of claim from shareholders gets the last priority after all the obligations of the company can be repaid (from the proceeds of the sale of the company's wealth). If there is still residual from the sale of the company's wealth, then the remainder is divided proportionally to all shareholders. However, if there is no residual company wealth, then shareholders will not get the proceeds from the liquidation. This condition is the toughest risk of shareholders. For this reason, a shareholder is required to continuously follow the development of the company.

In the secondary market or in daily stock trading activities, stock prices fluctuate in the form of both increases and decreases. The formation of the share price occurs due to the demand and supply of the shares. In other words, the stock price is formed by the supply and demand for the shares. The supply and demand occur due to many factors, both specific to the stock (the performance of the company and the industry in which the company moves) as well as macro factors such as interest rates, inflation, exchange rates and non-economic factors such as social and political conditions, and other factors. Signaling theory or signalling theory is based on the assumption that the information received by each party is not the same. This theory is related to information asymmetry which indicates the existence of information asymmetry between company management and parties interested in information. This signal theory was first developed by Ross in 1977. In building signal theory based on asymmetric information between information coming from management (well-informed) and information coming from shareholders (poor informed). Signal is a costly process, in the form of deadweight costing that aims to convince investors of the value of the company. A good signal is one that cannot be imitated by other companies that have low value due to the cost factor. Signal can be information stating that company A is better than company B or any other company. Signals can also be in the form of reliable information related to the company's future image or prospects.

Agency Theory explains that in a company there is a working relationship between shareholders as principals and management as agents. According to Scott, (2015:155): "Agency theory is a branch of game theory that study design of contract to motive a rational agent to act on behalf of a principal when the agent's interests would otherwise conflict with those of principals". In Suwardjono, (2014:234), explaining that an agency relationship is a relationship between the principal (principal) and the agent (agent) in which the agent acts on behalf of and for the benefit of the principal and for his actions (actions) the agent gets the reward for the relationship expressed in the form of a contract." Gitman and Zutter, (2015:19-20) explained that agency theory is based on the existence of an agreement relationship between two parties where one of the agent parties (the party who is obliged and responsible for managing the company and increasing the prosperity of the owner or profit of the company) agrees to act for the other party

(principal). Any manager who does not own 100% of the company is an agent acting on the ownership of another person (principal-agent/agency relationship). This relationship goes well when the agent is able to make decisions that are in accordance with the principal's will and do not go well when there are differences in interests. According to Hartono M (2017), the Event study method is a study to study the market's response to an event whose data is announced as an announcement. An announcement that has information, it is expected that the market will react at the time of the announcement. In relation to this journal, it is related to news announcements related to government policies such as PSBB (Large-Scale Social Restrictions) and PPKM (Enforcement of Restrictions on Community Activities) which affect the stock market during the pandemic.

Efficient Market Hypothesis is a theory explained in 1965 by Fama. This theory divides the market into 3 forms, namely *weak*, *semi-strong*, and *strong*. Each of these market forms has different characteristics of information absorption. The Theory of *Efficient Market Hypothesis* connects the absorption of existing information with the price of a stock. In the form of a *weak* market, the absorption of information is very low and it can be said that the stock price only reflects information in the past. For a *semistrong* form market, the stock price only reflects all *public information*. The most efficient form of the market is the *strong* which is the fastest in absorbing market information. In this *strong* form of market, the stock price already reflects all the information that exists, both public and private. For those as an efficient market, there is no longer an abnormal phenomenon of returns that occurs.

According to Zulfikar (2016), factors that affect stock prices can come from internal and external factors. The internal factors include: announcements about marketing, production, sales such as advertising, contact details, price changes, new product recalls, production reports, product safety reports and sales reports. Second, funding announcements, such as announcements related to equity and debt. Third, the announcement of the management board of directors announcements, such as changes and changes to directors, management, and organizational structure. Fourth, diversification take announcements such as merger reports, equity investments, take over reports by the acquirer and in the acquisition. Fifth, investment announcements, factory expansion, research development and other business closures. Sixth, labor announcements, such as new negotiations, new contracts, and others. Seventh, the announcement of the company's financial statements, such as profit forecasting before the end of the fiscal year and after the end of the fiscal, Earning Per share (EPS), Dividends Per Share (DPS), Price Earning Ratio, Net Profit Margin, Return On Assets (ROA), Return On Equity (ROE), Debt to Equity Ratio (DER), and others. While the external factors include: announcements from the government such as changes in interest rates on savings and time deposits, foreign exchange rates, inflation, as well as various economic regulations and deregulations issued by the government. Second, legal announcements, such as employee demands against the company or against their managers and company demands against their managers. Third, securities industry announcements, such as annual meeting reports, insider trading, trading volume or prices, trading restrictions or delays. Fourth, domestic political turmoil and exchange rate fluctuations are also factors that have a significant influence on the occurrence of stock market price movements on the stock exchange of a country, and various issues both domestically and abroad.

RESEARCH METHODOLOGY

This study employed quantitative descriptive research method. Descriptive research is a kind of research that carried out to find out the value of each variable, whether one or more variables are independent in nature without making relationships or comparisons with other variables. These variables can describe systematically and accurately regarding the population or regarding a particular field. (Wiratna Sujarweni, 2020). Research activities will be carried out at BRI which is the first state bank in the Republic of Indonesia. PT. Bank Rakyat Indonesia (Persero) Tbk. ("BRI", "Bank", or "the Company") started on December 16, 1895 in Purwokerto, Central Java under the name "Hulp en Spaarbank der Inlandsche Bestuurs Ambtenaren" which after several name changes was then officially established as Bank Rakyat Indonesia since December 16, 1968 based on Law No.21 of 1968. Since 1992, BRI's status has changed to a Limited Liability Company with 100% ownership of BRI in the hands of the government of the Republic of Indonesia, then in 2003, BRI conducted an Initial Public Offering (IPO) so that the composition of government share ownership in BRI became 53.19%, while the remaining 46.81% was owned by public shareholders. The information or data needed is:

1. Information or data related to the differences in BRI's stock prices before and during Covid-19 pandemic which is within the year of 2018 up to 2021 sourced from Indonesia Stock Exchange, 2022.
2. Information or data related to the efforts or programs carried out by BRI 2021 sourced from Indonesia Stock Exchange, 2022.
3. Information or data related to the external conditions that affect the stock prices of BRI 2021 sourced from Indonesia Stock Exchange, 2022.
4. Information or data related to BRI activities during the Covid-19 pandemic in 2020 up to 2021 sourced from Indonesia Stock Exchange, 2022.

RESEARCH FINDINGS

A. BRI Share Price in 2018-2021

This research was intended to find answers to the formulation of the problems that have been stated in the literature review, knowing the differences in BRI's stock prices before and during the Covid-19 pandemic, as well as knowing the external conditions of BRI that affect the stock prices from 2018-2021. The following is the price of BRI shares from 2018 to 2021 and the number of shares outstanding are as follows:

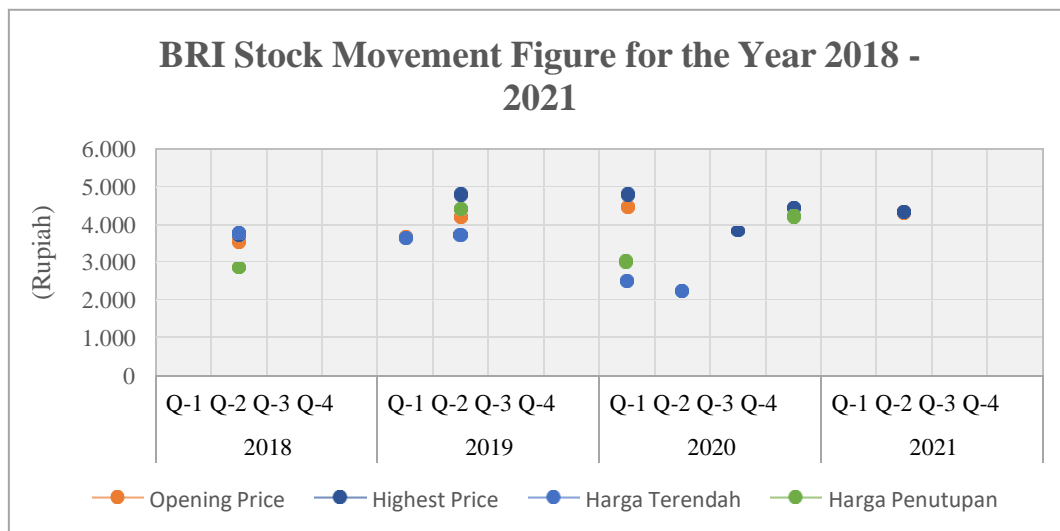
Table 1.1
BRI Share Price
Year 2018-2021

Year	Price per Share (Rp)				Number of Shares Outstanding (Shares)
	Opening	Highest	Lowest	Closing	
2018					
Quarter I	3.690	3.920	3.530	3.600	123.345.810.000
Quarter II	3.500	3.660	3.720	2.840	

Quarter III	2.890	3.410	2.830	3.150	151.558.678.941
Quarter IV	3.150	3.710	2.910	3.660	
2019					
Quarter I	3.610	4.140	3.580	4.120	123.345.810.000
Quarter II	4.140	4.730	3.660	4.360	
Quarter III	4.400	4.560	4.000	4.120	
Quarter IV	4.120	4.470	3.810	4.400	
2020					
Quarter I	4.400	4.740	2.440	3.020	123.345.810.000
Quarter II	3.020	3.300	2.170	3.030	
Quarter III	3.030	3.800	2.990	3.040	
Quarter IV	3.040	4.400	3.100	4.170	
2021					
Quarter I	4.068	4.771	4.068	4.293	123.345.810.000
Quarter II	4.293	4.302	3.776	3.844	
Quarter III	3.844	3.971	3.570	3.850	
Quarter IV	3.850	4.410	3.900	4.110	

Source: Indonesia Stock Exchange, 2022

Figure 1.1
BRI Stock Price Movement
Year 2018-2021



From the chart above, it can be seen that in 2018 starting from the first quarter to the fourth quarter experienced a fluctuating increase and decrease. At the opening of the first quarter, the price was higher than the opening price in the second, third, and fourth quarters of RP.3,690.00. The first quarter also occupied the highest share price compared to the second, third, and fourth quarters of RP.3,920.00, and the lowest share price was in the third quarter of RP.2,830.00. At the close of the second quarter, it occupied the lowest share price compared to other quarters, which was RP.2,840.00, and the fourth quarter occupied the highest share price of RP.3,660.00.

At the time of opening in 2019, the third quarter occupied a higher price compared to the opening price in the first, second, and fourth quarters of RP.4,400.00. The second quarter also occupied the highest share price compared to the first, third and fourth quarters of RP.4,730.00, and the lowest share price was RP.3,580.00 in the first quarter. At the closing of the first and third quarters, it occupied the lowest share price compared to other quarters, which was RP.4,120.00, and the fourth quarter occupied the highest share price of RP.4,400.00.

2020 was a fairly difficult year for BRI due to a significant decline in stock prices, especially in the second quarter and third quarter. The first quarter of 2020 occupied a higher price compared to other quarters at the time of opening, which was RP.4,400.00, the first quarter also occupied the highest share price during 2020 which was RP.4,740.00. The second quarter occupied the lowest share price during 2020, which was RP.2,170.00, and at the close of the first quarter occupied the lowest price of RP.3,020.00.

In 2021, BRI's share price has slowly begun to improve, as can be seen at the opening of the second quarter occupying the highest share price compared to other share prices of RP.4,293.00, and the third quarter occupied the lowest share price at the opening of RP.3,844.00. The first quarter also occupied the highest share price during 2021, which was RP.4,771, the third quarter occupied the lowest share price during 2021 of RP.3,570.00, and at the time of closing the first quarter share price occupied a higher price compared to other share prices of RP.4,293.00 and the second quarter occupied the lowest closing price of shares of RP.3,844, 00.

B. BRI Performances

Bank Rakyat Indonesia (BRI) is one of the state banks spread throughout Indonesia. BRI was established on December 16, 1895 in Purwokerto, Central Java by Raden Bei Aria Wirjaatmadja. Currently, the total assets owned by BRI are RP.1,678.10 trillion, with 53.19% of shares owned by the Government of the Republic of Indonesia and 46.81% being publicly owned. The following is a chart of stock prices along with BRI's performance from 2018-2021:

1. Year 2018-2019

2018-2019 is said to be a normal year where this year is a year with stable economic conditions before the Covid-19 pandemic hit the whole world since the beginning of 2020. BRI makes several efforts to improve service to its customers in the hope of providing quality service in accordance with customer expectations and desires. BRI achieved a net profit of RP.32.4 trillion. The following are some of the actions carried out by BRI in 2018 as follows:

- a. BRI launched Artificial Intelligence called Sabrina as *BRI New Assistance* which makes it easier for customers to get information about BRI.
- b. BRI encourages MSMEs to Go Digital by launching Indonesia Mall in collaboration with market place startups so as to provide opportunities for MSMEs to sell their products with a wider market.
- c. BRI issued several valuable surahs, namely:

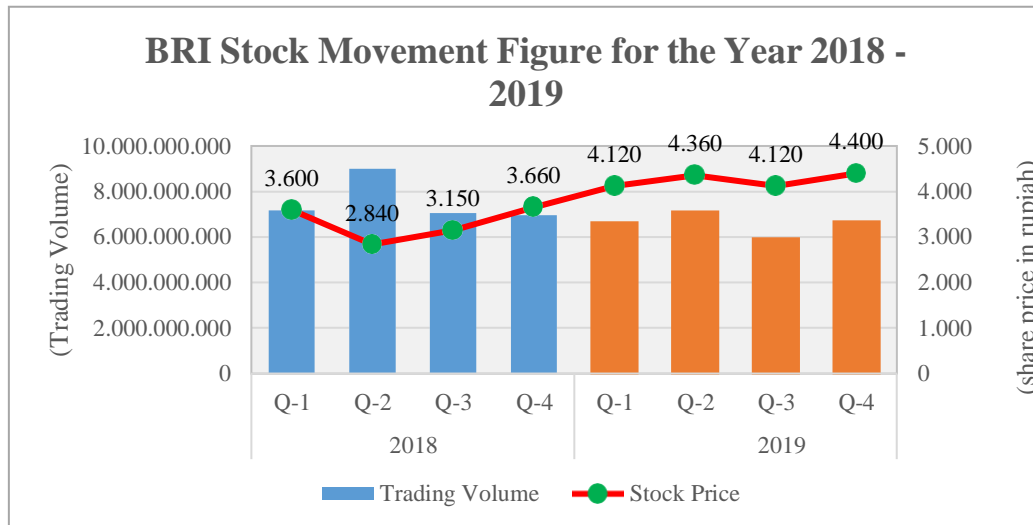
1. Sustainable bonds II BRI Phase IV in 2018 Series A, due on February 21, 2023, with a nominal value of RP.1,837,000,000,000 and a coupon or discount rate of 6.65% and an AAA rating from Pefindo.
 2. Sustainable bonds II BRI Phase IV in 2018 Series B, due on February 21, 2025, with a nominal value of RP.605,000,000,000 and a coupon/discount rate of 7.90% and an AAA rating from Pefindo.
 3. Sustainable bonds III BRI in 2018, due on June 21, 2023, with a nominal value of RP.500.000.000.000 and a coupon or discount rate of 7.70% and an AA rating from Pefindo.
- d. BRI has included 3 new businesses, 2 additional subsidiary companies, PT BRI Venture Investama (BRI Ventures) and PT BRI Danareksa Sekuritas (DS), as well as participation in PT danareksa Investment Management (DIM). For the participation that has been made by BRI, the number of subsidiary participations made by BRI Group becomes 8 subsidiary companies, namely Sharia (BRISyariah), Conventional banks (BRI Agro), Remittance (BRI Remittance), Insurance (BRI Life), Multifinance (BRI Finance), Venture Capital (BRI Ventures), and Securities (BRI Danareksa Sekuritas) and General Insurance (BRI Insurance).
- e. BRI also inaugurated the BRI Institute as one of the tangible manifestations of BRI in building national capacity or National Capacity Building in the MSME segment.

In 2019, BRI also made several efforts to improve its services so that it could provide satisfaction to customers. The net profit achieved by BRI in 2019 amounted to RP.34.4 trillion. Some of the efforts made by BRI are as follows:

- a. BRI through its subsidiary company called BRI Agro launched PINANG, the first Digital Lending Banking in Indonesia. By combining digital technology, PINANG speeds up the application process up to disbursements in less than 10 minutes. Applications can be made without having to go to the bank and without face-to-face activity. Through a fast, cheap, and safe process, as well as competing ceilings, PINANG will provide extra convenience to customers to apply for loans.
- b. BRI acquires a general insurance company called PT. Bringin Sejahtera Artha Makmur (BRINS), this acquisition is the company's strategic step to become an integrated financial solution that will further complement the financial services owned by the BRI Group.
- c. BRI is making breakthrough innovations in its financial products and services to establish itself as the leading financial institution in digital banking in Indonesia. BRI launched an online loan called CERIA. Through this launch, BRI became the first state bank to have an online loan application.
- d. On March 28, 2019 BRI issued a sustainable bond with a nominal value of USD500,000,000 for a period of 5 years. The receipts from the bond issuance will be used to fund eligible projects in accordance with the Sustainability Framework.

Figure 1.2

**BRI Stock Movement
 Year 2018-2019**



2. Year 2020-2021

The years of 2020 to 2021 were considered as quite difficult year for the economic world, where there was an outbreak of the Covid-19 pandemic that attacked the whole world. The COVID-19 pandemic has made quite critical changes for the Indonesian economy in particular. All efforts are made by the government and the private sector to survive in this situation. Indonesia's economic growth has decreased, as so of BRI. In 2020, the net profit obtained by BRI was RP.18.66 trillion. The following are the efforts made by BRI in 2020, as follows:

- a. BRI is actively becoming the government's main partner in implementing the National Economic Recovery or *Pemulihan Ekonomi Nasional (PEN)* program which had a positive impact, not only for debtors who are mostly MSMEs, but also for the company. As of December 2020, the PEN program implemented by the company is as follows:
 - 1) Distribution of MSME loans in order to accelerate PEN. In accordance with the target set by the government of RP.45 trillion (3 times) from the placement of government funds.
 - 2) Lending with guarantee schemes in the small and retail segments in the amount of RP.8.73 trillion to more than 14 thousand debtors.
 - 3) Distribution of interest subsidies on MSME loans of RP.5.47 trillion to more than 8.9 million recipients.
 - 4) Distribution of Micro Business Productive Assistance (*Bantuan Produktif Usaha Mikro or BPUM*) of RP.18.64 trillion to more than 7.7 million micro-enterprises.
 - 5) Distribution of Super Micro (*Kredit Usaha Rakyat or KUR*) in the amount of RP.8.66 trillion to more than 985 thousand debtors.
 - 6) Distribution of salary subsidies of RP.6.45 trillion to more than 5 million recipients
- b. As an effort to save debtors affected by Covid-19, as of December 2020, BRI has restructured RP.186.6 trillion to 2.8 million debtors, of which 95% are micro,

consumer, small and medium debtors. To make it easier for customers to transact in the middle of the Covid-19 pandemic, BRI presents the following digital innovations:

- 1) Launching the BRImo New Look
 - 2) The launch of Pasar.id, the existence of social distancing and large-scale social restrictions (PSBB) caused market activities to be limited, so that traders experienced turnover. BRI helps the traditional market by introducing online shopping (either through WA, Website, Mobile Apps, or Cooperation with startups)
 - 3) Launching digital saving. BRI launched a digital account opening service through a digital saving platform that can be accessed through BRI Bank channels and collaborating third parties, using 2 technologies, called face recognition and digital signature. So that customers do not need to come to the office to meet face to face with officers.
- c. Launching the Banking Professional Certification Institute in Indonesia (*Lembaga Sertifikasi Profesi Perbankan or BRISLP*)
 - d. Launching the BRI Micro & SME Index (BMSI). The launch of BMSI is BRI's concern for the activities of Indonesian MSMEs to become an information. BMSI became the first leading indicator in Indonesia to regulate MSME activities which one day could be beneficial to public policy.

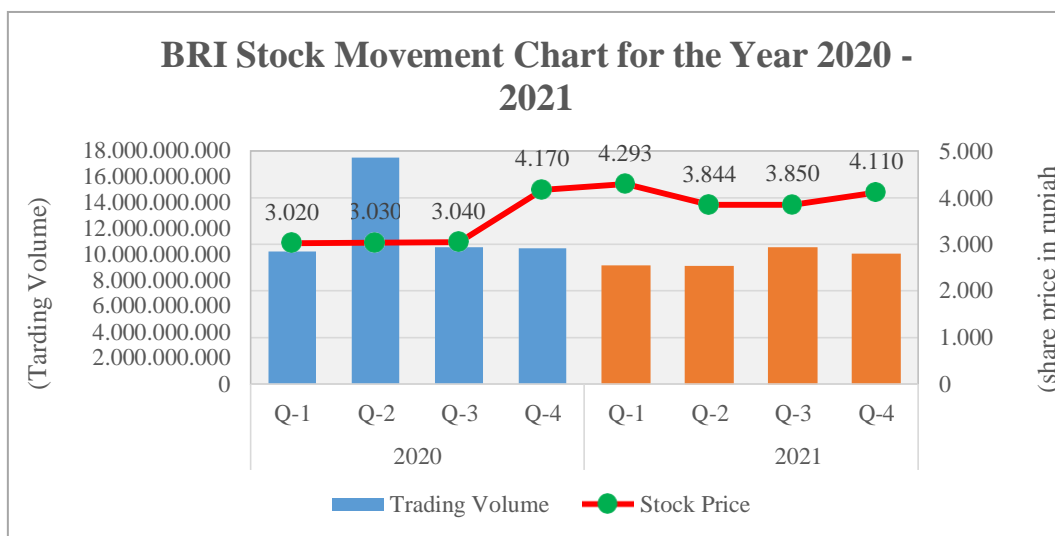
2021 has also been a difficult year for Indonesia, especially for BRI. The Covid-19 pandemic has experienced a significant increase, affecting transactions that occur in BRI. The net profit generated by BRI in 2021 is RP.32.22 trillion. Throughout 2021, in addition to producing strong organic growth performance, BRI carried out 3 large corporate actions as part of inorganic growth. Inorganic growth is not only to provide support for sustainable growth, but also part of the value creation process that never stops being carried out. The 3 corporate actions are:

- a. Consolidation of BRI Syariah together with Bank Mandiri Syariah and BNI Syariah into Bank Syariah Indonesia (BSI), where in this corporate action BRI was able to create the value indicated by an increase in BRI Syariah's share price by up to 4 times, from before the consolidation of around RP.500 to shares of Bank Syariah Indonesia which had reached a price range of RP.2,000 after consolidation. The establishment of Bank Syariah Indonesia is the first step in optimizing the potential of the Islamic market in Indonesia, which is the country with the largest Muslim population in the world, and able to bring Bank of Syariah Indonesia to become one of the important players in the global Islamic economy.
- b. BRI Life's strategic cooperation with FWD where this transaction BRI Life's valuation has increased 5.6 times since joining BRI in 2015. Through this partnership, BRI will optimize the strength of the company's customer base and infrastructure with partner experts to provide customer experience and new value proposition to more customers.
- c. Establishment of ultra micro ecosystem with Pegadaian and PNM which aims to provide integrated financial services to the Ultra Micro segment in Indonesia. In order to establish the Ultra Mikro Holding, the company has also conducted a

rights issue with a value of RP.95.9 trillion which is recorded as a rights issue spread across Southeast Asia, the 3rd largest in Asia, and the 7th largest in the world.

- d. As an effort to continue the positive momentum of national economic revival, BRI became a titling sponsor of BRI Liga 1 so that it is expected to drive the national economy. Especially so that the national football industry including SMEs, MSMEs, and derivatives such as football jersey convection companies, souvenir sellers, team trinkets, and the football shoe industry will again squirm again.
- e. BRI opened its sixth overseas outlet, the Branch Office in Taipei, Taiwan, located at No.166, Sec. 3, Nanjing East Road, Zhongshan District, Taipei City, Taiwan. The BRI Taipei Branch (BRITW) operation has started operating starting Tuesday, November 30, 2021. BRITW has also bagged an operational genie as a Full Retail Foreign Bank Branch Office Licence by Taiwan authorities. With this license, BRITW can provide deposit, loan, remittance, trade finance, and Treasury services to customers in Taiwan.

Figure 1.3
BRI Stock Movement
Year 2020-2021



C. External Conditions Affecting the Rise and Fall of Stock Prices

1. External Conditions of BRI in 2018

Global macroeconomic dynamics in 2018 had an impact on capital market conditions in Indonesia, which was marked by a decrease in the Composite Stock Price Index (JCI) by 20% at the level of 6,056 from the previous year's position of 6,356. This decline was mainly driven by several factors, including an increase in the benchmark interest rate which increased the cost of capital. In addition, there is a weakening trend in the global economy, such as the potential for an increase in the fed rate and uncertainty in US trade policy will affect investor psychology. However, macroeconomic conditions in Indonesia are still relatively good, characterized by an economic growth rate (GDP) of 5.2% and a low inflation rate (2.9%). In addition,

increasing government spending in the infrastructure sector is also a driving factor for Indonesia's economic growth.

Along with improving economic conditions, in 2018 BRI also recorded a better performance. Credit growth grew by 14.1% year on year, above the banking industry which was 12.2% year on year, while the growth of Saat's party funds was 12.2% year on year, better than the industry average of 7.19% year on year. BRI also managed to maintain credit quality where NPL was maintained at the level of 2.14% (Bank only) below the industry average of 2.67%.

BRI share price was the highest throughout in 2018 at Rp3,920 on January 23, 2018 and the lowest at Rp2,720 on May 22, 2018. BRI also become one of the most liquid public companies where the average trading volume of BRI shares is 125.7 million shares or RP.414.9 billion / day.

The impact of the trade war is also still one of the global risks that must be considered, but on the other hand, financial market uncertainty has eased slightly after the US Fed's monetary policy direction was more dovish by lowering the pace of the Fed Fund Rate (FFR) hike. For the Indonesian economy in 2019, it is estimated that it will be better, or able to grow around 5.1-5.3%, still supported by consumption and investment.

2. External Conditions of BRI Year 2019

In 2019, the global economic slowdown continues, but uncertainty in global financial markets tends to decrease. Although a number of risks still occur, there are positive developments related to the most significant trade talks between the US and China, as well as the Brexit process or the EXIT of the UK from the European Union.

World economic growth in 2019 is expected by the International Monetary Fund (IMF) to be at the level of 3.0%. In 2019, the economies of the United States and China tend to slow down due to limited stimulus and the impact of the imposition of tariffs that have been imposed previously. Economic gains occurred in Japan and Europe, although still limited due to improving domestic demand.

Positive developments in the US-China agreement have an impact on reducing global financial market risks and have a positive impact on economic developments in developing countries with foreign fund inflows. Although the global economy has not been entirely positive, the world's central banks are trying to stimulate the economy by lowering interest rates or keeping interest rates low. The Fed, for example, kept its level at 1.75% until the end of 2019. The Fed's move was followed by a number of central banks in developed and developing countries, including Bank Indonesia (BI).

During the world trade war, Indonesia's economic growth is still showing positive developments. In September 2019, Indonesia's economy grew by 5.02%. This is supported by maintained household consumption, accelerated fiscal expansion, and export improvements. Investment activity also showed an increase in a number of regions such as in Sulawesi related to nickel downstreaming and a number of economic transformation policies adopted by the government. So that the confidence of the business world is slowly but surely starting to increase again. Building investment also continues to improve driven by an increase in construction activities.

On the rupiah exchange rate side, its position shows a strengthening compared to the year of 2018 due to the support of indonesia's balance of payments (Neraca Pembayaran Indonesia or NPI) performance that is improving. In addition, rupiah appreciation was also supported by foreign exchange supply from exporters and continued foreign capital inflows in line with indonesia's maintained economic outlook, as well as the attractiveness of domestic financial markets that remained large.

Meanwhile, capital market developments during 2019 are still influenced by global and domestic sentiment. The Composite Stock Price Index (JCI) at the end of 2019 was at 6,299.53 or an increase of 2.18% when compared to the position at the end of 2018.

3. External Conditions of BRI Year 2020

2020 was a challenging year for the capital market, not only for domestic but also the entire world. The Covid-19 pandemic caused a decline in the performance of several sectors of the economy, which ultimately led to a decline in economic growth. Along with that, the performance of the IDX Composite was corrected to the lowest point at the level of 3,911, before increasing again.

Through the support of the MSME stimulus and the National Economic Recovery Program (PEN), the government was able to reduce the impact of Covid-19 and restore the economic conditions. Market optimism increased in line with the recovery of investor confidence in domestic economic conditions which showed a recovery in Q3. At the end of 2020, JCI contracted 5.09% YoY to reach the level of 5,979.07, decreasing compared to the 2019 index of 6,300.

Along with these conditions, BRI's stock performance also experienced the same thing. BBRI had experienced a decline in mid-May 2020. Through the stimulus of MSME support, BRI actively supports government policies in restructuring, accelerating, providing credit. Along with this, business performance recovered, and showed an increase.

At the end of 2020, BBRI performance was slightly corrected and was in the price range of RP.4,170, or decreased by 5.23% YoY BBRI's market capitalization reached RP.514.35 trillion at the end of 2020. This position makes BRI a state-owned enterprise with the largest market capitalization in Indonesia, and a bank with the third largest market capitalization in Southeast Asia.

4. External Conditions of BRI Year 2021

In 2021 BRI recorded a solid performance despite the challenging conditions due to on going Covid-19 pandemic. The Covid-19 pandemic has caused the global economic situation to face pressure and full of uncertainty, but the massive vaccination activities at the beginning of 2021 have given new hope to fight the Covid-19 pandemic. The global economic recovery in 2021 can be seen from the increase in economic activity which can be identified from the expansive pace of the manufacturing and servicing Purchasing Managers Index (PMI).

Nevertheless, the global economic recovery faces challenges with the continued presence of new variants of Covid-19, increasing economic activity that is not balanced with an adequate amount of supply that is the cause of rising commodity prices, as well as normalizing monetary policy of world central banks in order to control the inflation rate.

Indonesia's economic recovery still faces challenges from the development and handling of covid-19 cases in Indonesia as well as risks due to monetary policy normalization by the central bank. Bank of Indonesia normalization policy will continue to pay attention to exchange rate stability, inflation rate and the ability of the banking industry to expand credit, thus supporting the national economic recovery.

D. Activities Carried Out by BRI in 2020-2021 during the Covid-19 Pandemic

- March 26, 2020
The impact of the pandemic and social restrictions implemented by the government, increased e-channel and e-banking transactions significantly. BRI internet banking transactions increased by 38% from the previous month.
- March 27, 2020
BRI CSR program provides direct basic food assistance (BSL) for underprivileged communities or those economically affected by the Covid-19 pandemic. The amount of aid distributed was 50.000 packages with a total value of RP.5 billion. The impact of the beginning of the pandemic, which felt very heavy, some people could be helped by the program from BRI. This program is channeled through BRILink agents which is a manifestation of BRI's presence in community services.
- March 31, 2020
Credit Relaxation, the impact of the pandemic that shook caused low public consumption and decreased sales from the MSME sector, resulting in a shortage of income. Therefore, in accordance with the advice from the OJK, BRI provides credit relaxation to MSMEs where MSMEs get relief in terms of credit relaxation in order to survive in the midst of a pandemic. This credit relaxation has a very helpful impact on the MSME sector, where 80% is the micro segment in the face of pandemic shocks.
- April 15, 2020
BRI continues to intensify the KUR, an effort to support the government in relation to anticipating the effects of the spread of Covid-19. BRI continues to distribute financing to MSME actors. The steps made are by launching the BRISPOT application to become a tool for creditors so that the credit process can be carried out digitally.
- April 16, 2020
One Million Free Masks for Market Traders, in terms of assistance for MSME players in the midst of the Covid-19 pandemic. BRI plays an active role by providing 1 million free masks for traders who are still carrying out their activities in the market. This is to reduce the risk of spreading covid-19 in regional locations needed for daily needs such as markets.
- May 15, 2020
The BRI group workers' social movement "BRILiant Fight Covid-19" has raised 22.16 billion voluntary aid funds. The money will be donated to help communities throughout Indonesia affected by Covid-19.
- June 15, 2020
PaDi UMKM, BRI Together with eight other state-owned companies form an ecosystem of the MSME Digital Market. This is done to encourage micro, small and medium enterprises to "go online" so that they can survive during the pandemic.

- July 6, 2020
Kemenkop UKM and BRI encourage the revival of micro, small and medium enterprises through the distribution of KUR interest subsidies. This program has an impact on increasing and reducing the burden on MSME business actors where the segment is the main target market of BRI.
- July 7, 2020
BRI entered into a cooperation agreement with PT Askrindo and PT Jamkrindo. This has an impact on accelerating economic recovery by re-mobilizing the MSME sector.
- July 9, 2020
BRI held the BRILian Culture Agent Forum online. This is also the kick off moment for the BRI New Way of Working which can operate during a pandemic. And on the same date, BRI received 7 (seven) awards at once at the BUMN award event. With this award, BRI's stock price and generally JCI have increased after previously falling.
- July 17, 2020
BRI with other state banks launched the Digital Kredit UMKM or DigiKu program. This will have an impact on 1 million MSMEs which will receive a total value of 4.2 trillion.
- July 30, 2020
The signing of cooperation between BRI and Telkom related to the collaboration of satellite-based technology services. This affects the quality and wider network in digitization.
- August 19, 2020
BRI released its second quarter 2020 financial report. The strategy implemented by the company to continue to grow in the midst of the pandemic has yielded positive results. The company recorded a profit of 10.20 trillion with assets reaching of RP.1,387.76 trillion or grew 7.73%. This makes BRI's share price increase from the level of 3300 – 3600.
- September 1, 2020
BRI launched the Britama Festival program at the Virtual Launching conference. This program provides convenience for prospective customers by opening an account through the digital savings platform through the official website. It aims to reach millennial consumers in a digital way.
- September 4, 2020
BRI Customer Day 2020, this emphasizes BRI's commitment to accelerate digital transformation to become better, faster and safer.
- September 10, 2020
BRI and PT PP carried out the topping off ceremony process for the construction of the BRI Gatot Subroto Tower project in Jakarta.
- October 1, 2020
BRI through the CSR program "BRI Cares for River Conservation". The clean-up activity is a CSR program that aims to organize rivers that were previously full of garbage to become cleaner and neater for the use of the surrounding community.
- October 26, 2020

'BRI Bersih-bersih Kali' a clean-up program in Central Java area. This program includes river cleaning and management, healthy environment education, waste empowerment and management, construction of suggestions and infrastructure on the riverside. As well as community economic empowerment through AgenBRILink.

- November 11, 2020
Presentation of BRI's performance in the third quarter. The company recorded a profit of RP.14.15 trillion. This increases the confidence of MSMEs to rise immediately in the next period. This is in line with the movement of BRI shares which rallied from the previous month.
- November 18, 2020
BRI received 14 awards at the ESG Award 2020. With this award, BRI's stock movement continues to rally following the previous.
- December 10, 2020
BRI held the UMKM EXPO (RT) BRILIANEUR 2020, this event is a manifestation of consistency in empowering Indonesian MSMEs. This event successfully recorded a contract for the purchase of MSME goods of more than US\$ 59 million and involved 99 buyers from 24 countries.
- December 17, 2020
Recorded a positive performance throughout 2020 BRI Won a prestigious award. BRI called as the best BUMN in the banking category. This adds to investor confidence in the twisting condition of Indonesian economy.
- December 21-22, 2020
BRI held a Senior Leaders Forum & Rakernas BRI, in order to close 2020 and welcome 2021 BRI held this activity as a communication event for BRI management to align the vision and strategy of the Board of Management with all bri work unit leaders.
- January 06, 2021
The launch of BRImo New Look, with various ease of service and features that prioritize security, ease of customer service, especially young people who are really mobile and actively use BRI services. The impact is that BRI market can become more widespread and BRI products will be easier to use.
- January 20, 2021
Supporting the oil and gas industry, BRI Facilitates Pertamina Lubricant Financial Services. In order to encourage the progress of the national industry. With this collaboration, it provides benefits for both businesses of each company.
- January 21, 2021
EGMS 2021: BRI strengthens commitment to MSMEs
- January 28, 2021
BRI Group Economic Forum of 2021, to build optimism and the spirit of fighting power during a pandemic, this discussion is indeed very necessary. This forum provides a complete picture of how the direction of fiscal and strategic policies that will affect the world of investment and business in Indonesia.
- January 31, 2021

BRI Became the Winner of Best of The Best Communication, the Ministry of BUMN gave prestigious awards to BUMN companies at the BCOMSS event. BRI received a Gold Winner for the social media and corporate campaign category. This is one of the supports for the increase in BRI's stock price.

- February 02, 2021
BRIAPI, the First Open API in Southeast Asia to be PA-DSS and ISO 27001 Certified. Pioneer of open banking API in Indonesia who received PADSS certification. This complements BRIAPI which had previously been the first in Indonesia to obtain ISO:27001 certification. PADSS is a data security standard for payment applications and their integrators, related to the storage, process, and transmission of each customer's data. This has a good impact on BRI in order to get more investor or consumer confidence.
- March 19, 2021
BRI Data Hacktagon 2021, a Data Science competition that is useful for building awareness of the importance of data literacy to more than 4 million people through socialization and promotion activities. By utilizing accurate data, companies can make budget efficiencies and take policies that benefit the wider community. In addition, by utilizing the right analytical techniques, business organizations can increase profits, and provide better services for consumers.
- March 25, 2021
BRI distributes dividends of Rp.12.1 trillion. The distribution of dividends has increased public confidence in the condition of companies that are still profitable during the pandemic.
- April 28, 2021
BRI "Microfinance Outlook 2021", the results of a survey of MSME business activities in the first quarter of 2021 which indicated that MSME business activities were improving compared to the previous quarter. This eliminates the increasing squirming of economic recovery.
- May 25, 2021
BRI scored a profit of Rp.6.8 trillion and microcredit grew 12.4%, the company managed to maintain a positive performance amid opposing conditions. This indicates that the economic recovery is slowly starting to grow.
- May 28, 2021
In synergy with the Ministry of Tourism and Creative Economy, BRI launched the BRI Wisata Nusantara Debit Card, which aims to increase tourism marketing and the creative economy.
- May 31, 2021
BRI Wins the best Fintech and Big Data Award from the Digital CX Awards 2021, this is very good for BRI which strives to provide the best service for customers.
- June 17, 2021
BRI Wins 3 Prestigious Asia Money Awards.

- June 22, 2021
BRI named as the Best Bank in Indonesia according to the Asian Banker.
- July 25, 2021
Bri's EGMS 96% of the vote approved the issuance of 28.67 billion new shares at the BRI EGMS. This is in the context of forming an ultra-micro holding so that the company can be even more solid and will have a good impact on the community because it is facilitated by a system that will be integrated.
- August 12, 2021
BRI becomes the Title Sponsor of Liga 1, by aligning the company's strategy on digital transformation, it is hoped that the existence of BRI can awaken the football industry and build optimism of the Indonesian people.
- August 13, 2021
The Ministry of Transportation and BRI integrate sitolaut with digital banking services, to make it easier for MSMEs.
- August 19, 2021
Commemorating the Independence Day of the Republic of Indonesia, BRI Distributes education funds for 68 Paskibraka and 1,800 Children of Health Workers.
- August 29, 2021
The Minister of SOEs and BRI supports The Cluster Business Model Rice Production & The Use of Modern Technology so that it can help increase the supply of rice needs in the surrounding area.
- September 08, 2021
BRI titled as the "Best Place to Work in Asia" by HR Asia, this proves that BRI is on-track in realizing one of the parameters of its aspirations as "Home to the Best Talent"
- September 13, 2021
Record the history of Indonesian MSMEs, BRI officially become as the Holding of BUMN Ultra Micro, the formation of this holding will have a very good impact on BRI's own performance because this formation will make the system more integrated and lending to MSMEs easier, more efficient, and safer.
- September 29, 2021
BRI Right Issue records history with a value of RP.95.9 trillion, this is intended in the context of the formation of Ultra Micro Holding which will be more exclusive and integrated for customers or MSMEs.
- October 03, 2021
BRI was inaugurated as the Best SME Bank in Indonesia according to Asia Money, this award was obtained after BRI was able to maintain performance in the midst of a pandemic and at the same time save SMEs through a business follow stimulus strategy.
- October 07, 2021
BRI EGMS affirms commitment to sustainable finance implementation.
- October 08, 2021
BRI Digital Transformation Wins 2 International Awards, the awards obtained are the "Special Award for Digital Resiliency" and "CIO of the Year" at the IDC Future of Enterprise Awards 2021. This gives confidence in BRI's innovative and responsive

performance in managing business during a pandemic, as well as increasing the confidence in economic recovery.

- October 27, 2021
MSME Loans grew 12.50%, profit of RP.19.07 trillion, until the end of the third quarter BRI was able to record a healthy and strong performance, with this kind of performance investor confidence increased and increased BRI's share price.
- November 17, 2021
BRI won the highest award for Asia Sustainability Report Rating of 2021
- November 27, 2021
BRI Wins 4 awards in Bank Indonesia Award of 2021.
- November 30, 2021
BRI opened up the branch office in Taiwan to optimize business potential in East Asia, this expansion activity will expand BRI's network and target market in East Asia.
- December 09, 2021
BRI won The Most Trusted Company Award of 2021, with this award, it can increase customer and investor confidence in BRI.
- December 09, 2021
BRI held UMKM EXPO (RT) Brilliantpreneur of 2021.
- December 16, 2021
Celebrating the 126th anniversary with the theme "Memberi Makna Indonesia". The company also made the BRILian Village program as an example of concrete evidence to Indonesia. BRILian Village is a BRI assisted village that has four aspects of the ecosystem. First, BUMDes are active as drivers of the village economy. Second, digitalization implemented in villages, including digital finance and the use of BRI digital products. Third, innovation is a village that is creative in solving social problems. Fourth is sustainability, namely Tangguh Village which is able to improve the welfare of rural communities through the leading business sector of their villages in a sustainable manner.

All of those various activities that carried out by BRI during pandemic of covid-19 that have mentioned above had a great impact on BRI's performance which affect BRI's stock prices particularly during the year of 2020 to 2021. BRI's commitment to maintaining business quality through selective growth amid the pandemic is manifested in its performances. Despite the challenges and unprecedented time due to the covid-19 pandemic, BRI consistently delivers good performance. This is fostered by the company's commitment to continue growing and progressing with Micro, Small and Medium Enterprises (MSMEs) in the difficult times. The program that carried out by BRI is expected to have positive impacts for both internal of BRI and the customers Malini, H., & Nilam, F. B. (2022).

CONCLUSION

After a gradual data analysis of stock price variables, external conditions that affect stock prices, and activities carried out by BRI during the Covid-19 Pandemic, the following conclusions and suggestions were obtained in this study. Based on this research, it can be concluded that there was a significant decrease on the stock prices before the Covid-19 pandemic, the lowest share price,

occured in 2018 to 2019 of Rp.2.830,- and at the time of the pandemic of Covid-19, occured in 2020 to 2021 of Rp.2.170,-. BRI external conditions also affect the rise and fall of their stock prices, such as the trade war between the US and China, Brexit, the pandemic of Covid-19, as well as the existence of new variants of Covid-19 which also have an impact on the development of BRI's stock prices. The efforts and activities that carried out by BRI have positive impacts in increasing the stock prices, especially in 2020 and 2021, where in 2021 the stock price has maintained a fairly good position, with the highest share price of Rp.4,771, where the share price is the highest share price from 2018 to 2021.

Suggestion:

These are providing suggestions based on the analysis of this research, first, for the Issuers, the ups and downs of stock prices that occur are not only because of the external conditions of the company, but also from the internal activities carried out by the company. Therefore, issuers are advised to pay more attention to the policies and activities that carried out so that they can continue to maintain the stability of the stock prices. Second, for Shareholders or Investors, should pay attention to every policy carried out by the company and its impact on the stock price. Moreover, investors should also consider external factors of the company such as economic conditions, politics, and market conditions that occur.

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Credit Risk Stress Testing on Regional Development Banks in Indonesia

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Abstract: This research aims to conduct credit risk stress test towards regional development banks (*Bank Pembangunan Daerah*) in Indonesia. The methodology of this research is based on the guideline set by Bangladesh Bank. The result shows that all of the banks can withstand the stress for every scenario at every level of severity.

Keywords: Credit, Risk, Stress Testing.

Introduction

The 2008 global economic crisis, which started in the United States (U.S.), was partly caused by the subprime mortgage crisis. Subprime mortgage is a type of housing loan intended for Americans who are deemed financially nonbankable. The Fed implemented a policy of lowering its interest rates to 1 percent in order to boost U.S. economic growth, with the hope that investments, including investment in property, could grow so as to improve the American economy.

As reported by the Bank for International Settlement (BIS) in 2008, the root cause of the subprime mortgage crisis are financial market activities that escaped U.S. financial services authority's controls, which are excessive lending and imprudent lending process. This is the origin of the subprime mortgage crisis that impacted the whole world.

Prior to the global financial crisis of 2008, the use of bank resilience tests against extreme market pressures by regulators were still very limited, especially as a tool that can provide assistance in setting financial policy. Banks usually only conduct stress tests for their internal needs, to identify the banking sector reactions to extreme events. But the global crisis marked a turning point, where ever since then, financial authorities started to develop and implement a stress testing framework for concurrent bank stress test.

In 1996, the Basel Committee on Banking Supervision recommended banks and investment companies to conduct stress tests in order to evaluate their ability to respond to latent risks from extreme market events. However, until 2007, stress test was only conducted for internal assessment needs. It was only in 2007, that government financial regulatory bodies became interested in conducting their own stress tests as a risk management tool, to ensure effective

operation of financial institutions.

Referring to the best practices used in various developed countries, Bank Indonesia (BI) carries out their own compliance-based supervision (CBS) and risk-based supervision (RBS). CBS is a supervisory model based on the bank's ability to comply to regulations set by Bank Indonesia and their prudence in terms of operations and managements, while RBS oversees the bank's performance from a variety of risk potentials inherent in the bank's business.

In line with their RBS, BI then formulates recommendations for liquidity risk management standards through 4 pillars of risk management, namely: a. Active supervision by the board of commissioners and directors on liquidity risk; b. Liquidity risk policies, procedures and limits; c. Liquidity risk management process; d. Internal control system for liquidity risk. The risk management process for liquidity risk includes the process of identification, measurement, monitoring, and risk control.

Banks should also evaluate the various assumptions and estimates used in their periodic liquidity risk measurements in order to ensure its validity. The measurement tools should include at least: cash flow projection, liquidity ratio, maturity profile, and stress testing. Stress tests are conducted at least once every 3 months, or in a shorter period of time if the Bank and/or BI considers that abnormal conditions may cause the bank to be exposed to liquidity risks that cannot be tolerated. Through the results of this resilience analysis, BI supervisors could then obtain an overview of the bank's fairness and resilience in various macroeconomic scenarios that may occur (Malini, H. (2021).

BI conducts regular stress tests to determine the durability of Indonesia's financial system in the face of various adverse risks from time to time. The results of the stress test were also publicly announced as a form of urging the relevant parties to mitigate risks and take the necessary measures if the situation worsens. In addition, stress tests can be conducted internally by banks as part of their own risk management, or with supervisory authorities as part of regulatory oversight of the banking sector. Stress test is intended to detect weak points in the banking system at an early stage, so that precautions can be taken by banks and regulators.

In Indonesia, stress testing is an area of research that continues to grow where major private or government owned banks, that operates on national level, tends to be the one that garners most of the attention. However, in Indonesia there are also Regional Development Banks (*Bank Pembangunan Daerah/BPD*) that usually operates on provincial levels. While *BPD* form an integral part of the Indonesian banking system, there seems to be a lack of stress test research on these banks. Performing a stress test on *BPD* should help to provide a clearer picture regarding the resiliency of the Indonesian banking system.

Litterature Review

Stress Testing

According to Ong (2014), stress testing is a “what if” exercise. It measures the sensitivity of a portfolio, an institution, or a financial system to exceptional but plausible shocks. The answer involves identifying relevant risk drivers; selecting the appropriate method or model; using that particular method or model to calculate the effects of large shocks; and interpreting the results correctly. Stress testing methods and models can be categorized into three main approaches, which are accounting-based, market priced-based, and macro-financial approach. Most stress test methods aim to estimate the amount of extra capital needed or “hole” in a bank or banking system in the event of an adverse shock.

The accounting-based approach, also popularly known as the balance sheet approach, is the “natural” approach to stress testing for banks and other financial institutions. The reason is twofold: first, balance sheet information is publicly available for financial institutions in a standardized format, which facilitates peer comparison and systemwide stress tests; second, the approach allows a bottom-up view on the vulnerabilities of institutions and hence the identification of important risk drivers. These two dimensions are key advantages of the approach compared to market-based models, which are based on markets’ perceptions of default probabilities and other risk drivers embedded in market prices (such as stock and bond prices and credit default swap spreads), which are not necessarily available for all banks, even in developed markets.

Blaschke et al. (2001) states that stress tests begin with the specification of the type of risks to be considered and the appropriate models to use. Stress tests can focus on individual risks, such as credit risk or interest rate risk, or can encompass multiple risks. The next element of a stress test involves deciding on the range of factors to include, followed by the specification of scenarios. Stress tests can involve estimating the impact of a change in a single risk factor (a sensitivity test), or the effect of a simultaneous move in a group of risk factors (a scenario analysis). Scenarios can be designed to encompass both movements in individual market variables (such as prices) and changes in the underlying relationships between different asset markets (such as correlations and volatilities). Stress testing can be based on historical scenarios, employing shocks that occurred in the past, or can be based on hypothetical scenarios, constructed to take account of plausible changes in circumstances that have no historical precedent.

Various international and national authorities develop their own guidelines and methods for stress testing. For example, Bangladesh Bank develops a guideline for stress testing for banks in 2010 (Bangladesh Bank, 2010). In the guideline, Bangladesh Bank develops a hypothetical sensitivity analysis where three levels of severity (minor, moderate, major) are tested for five types of risk factors (credit risk, interest rate risk, exchange rate risk, equity price risk, liquidity risk).

Credit risk is the risk that a counter-party or obligor will default on their contractual obligations. It refers to the risk that the cash flows of an asset may not be paid in full, according to contractual agreements (Blaschke et al., 2001). Recent history has shown that credit risk is at the heart of solvency problems in the banking sector, manifesting itself largely through balance sheet and cash flow solvency problems of banks (Buncic and Melecky, 2012). For most banks, loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank (BIS, 2000). More than four-fifth of the bank balance sheet items are exposed to it (Van Greuning & Bratanovic, 2009).

For credit risk stress testing, it is common to use an increase in non-performing loan (NPL) to estimate its effect on a bank's Risk-Weighted Assets (RWA) and its capital (Čihak, 2007). Meanwhile, Čihak (2007) also provides an example where an increase in credit risk can be represented by an increase in NPLs of a specific sector. A shift in NPLs category can also be used to represent an increase in credit risk (Ong et al., 2010).

For a variable to be used to measure the impacts of the stress tests, it should have two key properties: (1) it should be possible to interpret the variable as a measure of financial soundness of the system in question; and (2) it can be credibly linked to the risk factors (Čihak, 2007). Capital Adequacy Ratio (CAR) is one of the various variables that can be used in order to measure the impact of the stress test. CAR is often used because the notion of stress is understood as a threat, and its existence has a negative effect on the "system" of banks, in particular the financial outcome which charges directly on CAR, and hence the value assigned to the owners (Aktar Kamal and Mohsin, 2012). Such an assumption should be regarded as legitimate, because the owners are responsible for the nature and scale of the risk undertaken by the bank regardless of whether the source of risk is the environment (for example, a crisis), or whether this is due to bad decisions of the owners (Wiszniowski, 2010). This follows from the fact that banks are institutions of public trust believed to be given a special supervision and special rules in protecting deposits and other liabilities from any possible inability. Hence, depositors and other creditors of the bank should not be charged off for any negative effects. CAR is also useful because it is scaled, which allows comparison among institutions (Čihak, 2007).

Financial regulators commonly set a capital requirement, usually expressed in CAR, for financial institutions operating within their country. BI, the financial regulator in Indonesia, currently sets the capital requirement at 8% (Bank Indonesia, 2013). These requirements are put into place to ensure that banks do not take on excess leverage and risk becoming insolvent. Generally, a bank with a high CAR is considered safe and likely to meet its financial obligations. During the process of winding-up, funds belonging to depositors are given a higher priority than the bank's capital, so depositors can only lose their savings if a bank registers a loss exceeding the amount of capital it possesses. Thus, the higher the bank's CAR, the higher the degree of protection of depositor's assets.

Empirical Review

Stress testing for banks is a field that continues to expand in the last several decades. In this section, the author will present some of the studies related to bank stress test.

Aktar Kamal and Mohsin (2012) performed a stress test case study on ten commercial banks in Bangladesh. In their study, they found that 8 out of the 10 banks tested were capable of withstanding liquidity shocks while 5 out of the 10 banks tested were able to withstand the equity shocks. In the study, stress tests for credit, equity, and liquidity risk were performed in accordance to the guideline set by Bangladesh Bank (Bangladesh Bank, 2010).

Mazreku and Morina (2016) performed a stress test for credit risk on the banking sector in Kosovo. The test concluded that the Kosovo banking sector was capable of handling a rise in its credit risk. The study was performed through a series of scenario analysis where on the first scenario, the economy of Kosovo is hit with a 2.6% economic decline. The second scenario is the combination of the condition described in the first scenario with a 2% fall for interest on assets, a 1.5% rise for interest on liabilities, and a 20% depreciation of the Euro's exchange rate. The third scenario is the bankruptcy of three of the largest borrowers for each bank. The fourth scenario is the bankruptcy of five of the largest borrowers for each bank (Malini, H. (2021).

Hidayat et al. (2018) performed a stress test on the Indonesian Islamic banking industry. Their study shows that Islamic banks in Indonesia are immune from losses if NPL is under 8.5%. They also found that, by assuming LGD is constant at 40%, the industry will not go bankrupt as long as PD is less than 9%. The study also concludes that there was no liquidity threat for Islamic banks in Indonesia. The stress tests were divided into three areas: profitability stress test, capital stress test, and liquidity stress test.

Research Hypothesis

An increase in credit risk will cause a stress in bank's resilience. The increase in credit risk is represented by three types of shocks, increase in the NPLs, negative shift in the NPLs categories, and increase in the NPLs of a particular sector. Meanwhile, a Bank's resiliency can be represented by its CAR.

The additional required provision that resulted from each of the shocks will negatively affect a bank's RWA and its capital, thus causing its CAR to change. The following tables, sourced from Bangladesh Bank (2010) with slight adaptation by the author, provide a mathematical equation that helps to explain how each shock affects CAR:

Table 1: Calculation method for shocks type 1 (Increase in the NPLs)

Increase in NPLs	Total Loan x Shock Percentage (1% or 2% or 3%)
Increase in Provisions	Increase in NPLs x 100%
Revised Capital	Total Capital – Increase in Provisions
Revised RWA	Total RWA – Increase in Provisions
Revised CAR (%)	Revised Capital / Revised RWA

Table 2: Calculation method for shocks type 2 (Negative shift in the NPLs categories)

Weighted amount of provision after Shift in Categories (Category I)	(Total Loan (Category I) x Shock Percentage (50% or 80% or 100%) x Provisioning Rate) + (Total Loan (Category I) x Shock Percentage x Provisioning Rate)
Weighted amount of provision after Shift in Categories (Category II)	(Total Loan (Category I) x Shock Percentage x Provisioning Rate) + (Total Loan (Category II) x Shock Percentage x Provisioning Rate)
Weighted amount of provision after Shift in Categories (Category III)	(Total Loan (Category II) x Shock Percentage x Provisioning Rate) + (Total Loan (Category III) x Shock Percentage x Provisioning Rate)
Weighted amount of provision after Shift in Categories (Category IV)	(Total Loan (Category III) x Shock Percentage x Provisioning Rate) + (Total Loan (Category IV) x Shock Percentage x Provisioning Rate)
Weighted amount of provision after Shift in Categories (Category V)	(Total Loan (Category IV) x Shock Percentage x Provisioning Rate) + (Total Loan (Category V) x Provisioning Rate)
Weighted amount of provision after Shift in Categories	Weighted amount of provision after Shift in Categories (Category I) + Weighted amount of provision after Shift in Categories (Category II) + Weighted amount of provision after Shift in Categories (Category III) + Weighted amount of provision after Shift in Categories (Category IV) + Weighted amount of provision after Shift in Categories (Category V)
Increase in Provisions	Total Provisions - Weighted amount of provision after Shift in Categories
Revised Capital	Total Capital – Increase in Provisions

Table 2 **Continued**

Revised RWA	Total RWA – Increase in Provisions
Revised CAR	Revised Capital / Revised RWA

Table 3: **Calculation method for shocks type 3 (Increase in the NPLs of a particular sector)**

Increase in NPLs	Total Loan of a Sector of Industry (i.e., Agriculture) x Shock Percentage (5% or 7.5% or 10%)
Increase in Provisions	Increase in NPLs x 100%
Revised Capital	Total Capital – Increase in Provisions
Revised RWA	Total RWA – Increase in Provisions
Revised CAR	Revised Capital / Revised RWA

The following are the hypotheses advanced in this research:

- 1) Increase in bank’s NPL will not affect the bank’s ability to maintain its regulatory CAR.
- 2) Negative shift in bank’s NPL categories will not affect the bank’s ability to maintain its regulatory CAR.
- 3) Increase in bank’s NPL of a particular sector will not affect the bank’s ability to maintain its regulatory CAR.

Methods

The form of research in this paper is quantitative research. The objects of this research are Indonesia’s *BPD* whose headquarters are found all over Indonesia. This research covers the financial year of 2021. The data that will be collected for the purpose of this research are secondary data that are collected from the bank’s annual reports for the year 2021. Specifically, the data required for this research are:

- 1) Total loan
- 2) Total loan for each loan category
- 3) Total loan for the agricultural sector
- 4) NPL
- 5) Total RWA
- 6) Total capital

The population of this research are *BPD* in Indonesia. At the time of writing, there are 26 *BPD* in Indonesia. In terms of sampling, this research will use simple random sampling in order to determine its samples. The total number of samples in this research is 6.

The variables in this research are: (1) Credit shocks, as independent variable; (2) CAR, as dependent variable.

Table 4: **Research Variables Operationalization**

Variables	Theoretical Definition	Operational Definition
Credit Shocks	Increase in the level of non-performing loans of the bank	Increase in NPLs
		Shift in NPLs categories
		Increase in the NPLs of a particular sector
CAR	Ratio of the bank's capital to its risk	

The credit risk stress test for this research will be performed in accordance to the stress test guideline set by Bangladesh Bank (2010). The stress test for credit risk assesses the impact of an increase in credit risk for the banks. The increase in credit risk is represented by three types of shocks:

- 1) Increase in the NPLs. The three scenarios shall explain the impact of 1%, 2%, and 3% of the total performing loans directly downgraded to bad/loss category having 100% provisioning requirement.
- 2) Negative shift in the NPLs categories. The three scenarios shall explain the impact of 50%, 80%, and 100% downward shift in the NPLs categories.
- 3) Increase in the NPLs of a particular sector. The three scenarios shall explain the impact of 5%, 7.5% and 10% performing loans of a particular sector directly downgraded to bad/loss category having 100% provisioning requirement. The sector chosen for this research is agriculture.

The additional required provision will be calibrated in the CAR for each scenario of each shock. The revised CAR for each scenario will then be compared to the minimum regulatory CAR set by Bank Indonesia which sits at 8% to see if the banks could comply with the regulation in the event of a shock. If the revised CAR is higher than 8%, then it can be concluded that the bank can withstand that particular shock, while the opposite is also true.

Findings

The following table shows the summary of the data collected for this study. The data are collected from financial reports from 6 *BPD* in Indonesia. The banks are Bank BJB, Bank Jatim, Bank Kalbar, Bank Kalteng, Bank Kalsel, and Bank Nagari. The data covers the financial year of 2021.

Table 5. **Financial Data Summaries (In Million Rupiah)**

	BJB	Jatim	Kalbar	Kalsel	Kalteng	Nagari
Loans	95,813,046	42,749,559	12,170,978	9,753,451	7,535,330	20,972,783
Current	92,388,702	40,049,631	11,855,466	9,228,247	7,479,493	20,272,204
Special Mention	2,156,497	783,556	63,968	149,557	38,878	179,239
Substandard	229,121	62,864	10,683	9,912	2,785	16,347
Doubtful	80,102	91,537	13,233	38,684	4,708	25,301
Loss	958,624	1,761,971	227,628	327,051	17,592	479,692
Non-Performing Loan	958,624	1,761,971	227,628	327,051	17,592	479,692
Loan to Agricultural Sector	1,130,839	1,145,814	295,919	804,012	120,551	1,785,103
Risk Weighted Assets	82,558,110	40,776,010	11,866,734	8,416,558	6,283,583	15,766,841
Capital	14,786,544	8,825,829	3,216,060	2,076,070	1,493,314	3,271,143
CAR	23,77%	21,64%	27,10%	24,67%	23,77%	20,75%

Table 6 shows the stress test results for shock type 1 (increase in NPL). As can be seen, all of the banks tested were able to remain compliant in terms of CAR requirements. This can be seen by comparing the banks revised CAR to the imposed regulatory CAR limit of 8% (Rivaldo, R., & Malini, H. (2021).. Bank Kalbar was consistently able to show the highest level of CAR compared to the rest of the bank tested in this study and that is true across all scenario. Meanwhile, Bank BJB was the bank with the lowest level of CAR compared to the rest and that is also true across all scenario. On average, scenario 1 results in a CAR drop of 0.88%. Scenario 2 results in a CAR drop of 1.78%, while scenario 3 results in a drop of 2.71%.

Table 6. **Stress Test Results for Shock Type 1 (Increase in NPL)**

Banks	Revised Capital Adequacy Ratio (CAR)					
	Scenario 1 (1%)	Above Regulatory Limit (8%)	Scenario 2 (2%)	Above Regulatory Limit (8%)	Scenario 3 (3%)	Above Regulatory Limit (8%)
BJB	16.96%	Yes	15.98%	Yes	14.98%	Yes
Jatim	20,85%	Yes	20,04%	Yes	19,21%	Yes
Kalbar	26,36%	Yes	25,60%	Yes	24,83%	Yes
Kalsel	23,81%	Yes	22,94%	Yes	22,05%	Yes
Kalteng	22,84%	Yes	21,90%	Yes	20,93%	Yes
Nagari	19.73%	Yes	18.68%	Yes	17.61%	Yes

Table 7 shows the stress test results for shock type 2 (negative shift in NPL categories). Again, all of the banks tested were able to remain compliant in terms of CAR requirements. This can be seen by comparing the banks revised CAR to the imposed regulatory CAR limit of 8%. Bank Kalbar

was consistently able to show the highest level of CAR compared to the rest of the bank tested in this study and that is true across all scenario. Meanwhile, Bank BJB was the bank with the lowest level of CAR compared to the rest and that is also true across all scenario. On average, scenario 1 results in a CAR drop of 0.19%. Scenario 2 results in a CAR drop of 0.29%, while scenario 3 results in a drop of 0.37%.

Table 7. Stress Test Results for Shock Type 2 (Negative Shift in NPL Categories)

Banks	Revised Capital Adequacy Ratio (CAR)					
	Scenario 1 (50%)	Above Regulatory Limit (8%)	Scenario 2 (80%)	Above Regulatory Limit (8%)	Scenario 3 (100%)	Above Regulatory Limit (8%)
BJB	17,57%	Yes	17,37%	Yes	17,24%	Yes
Jatim	21,40%	Yes	21,26%	Yes	21,16%	Yes
Kalbar	27,03%	Yes	26,98%	Yes	26,95%	Yes
Kalsel	24,43%	Yes	24,29%	Yes	24,20%	Yes
Kalteng	23,69%	Yes	23,65%	Yes	23,62%	Yes
Nagari	20,60%	Yes	20,51%	Yes	20,45%	Yes

Table 8 shows the stress test results for shock type 3 (increase in NPL of agricultural sector). And yet again, all of the banks tested were able to remain compliant in terms of CAR requirements. This can be seen by comparing the banks revised CAR to the imposed regulatory CAR limit of 8%. Bank Kalbar was consistently able to show the highest level of CAR compared to the rest of the bank tested in this study and that is true across all scenario. Meanwhile, Bank BJB was the bank with the lowest level of CAR compared to the rest and that is also true across all scenario. On average, scenario 1 results in a CAR drop of 0.05%. Scenario 2 results in a CAR drop of 0.09%, while scenario 3 results in a drop of 0.13%.

Table 8. Stress Test Results for Shock Type 3 (Increase in NPL Of Agricultural Sector)

Banks	Revised Capital Adequacy Ratio (CAR)					
	Scenario 1 (5%)	Above Regulatory Limit (8%)	Scenario 2 (7.5%)	Above Regulatory Limit (8%)	Scenario 3 (10%)	Above Regulatory Limit (8%)
BJB	17,85%	Yes	17,83%	Yes	17,80%	Yes
Jatim	21,62%	Yes	21,60%	Yes	21,58%	Yes
Kalbar	27,08%	Yes	27,07%	Yes	27,05%	Yes
Kalsel	24,59%	Yes	24,52%	Yes	24,45%	Yes
Kalteng	23,75%	Yes	23,74%	Yes	23,72%	Yes
Nagari	20,66%	Yes	20,57%	Yes	20,48%	Yes

Conclusion

In conclusion, all of the banks tested were able to keep their level of CAR above the regulatory limit. This is true for all types of shock and all scenario for each shock. It can therefore be concluded further that because all of these banks were able to pass the stress test, further capitalization may not be necessary. It can also be concluded that all of the banks can continue to expand their credit service even in the case of a stress towards their banking system.

For the banks tested in this research, the results of this research can be used to help the banks to better prepare for a stress event that may happen in the future. For the general populace, this result show that they can trust the banks to carry on business as usual even in the events of a stress towards the bank itself.

It is important to point out that this is only a simple sensitivity analysis, which only measures the change in the value of portfolio for shocks of various degrees to different independent risk factors while the underlying relationships among the risk factors are not considered. There are other techniques to perform stress testing such as scenario analysis and extreme value scenario analysis. Further testing using the other techniques mentioned is necessary in order to gain a more complete picture of the bank's resiliency in the event of a stress.

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Analysis of Job Promotion, Upward-downward Communication, and Work Environment on Employee Job Satisfaction

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Abstract: The aim of research was to develop a measurement and structural model of employee job satisfaction based on communication (upward-downward), job promotion, and work environment (case study at PT. Holcim Indonesia, Tbk). This research uses survey method, 360 person of permanents employees of PT. Holcim Indonesia as a population and 190 employees as a respondent. Sampling using proportional random sampling technique, and was collected using a Likert scale. Analysis technique this research used is Structural Equation Modeling (SEM-LISREL) and SPSS software. The research results showed that job communication, promotion, and work environment had a direct positive effect on job satisfaction (partially and together impact). Job promotions and communication have a positive direct effect on the work environment of employees. Research conclusion is that communication, and job promotion have an indirectly effect job satisfaction through work environment as mediating variable.

Keywords: *Upward-downward Communication, Promotion, Work Environment, Indirect*

Introduction

Present, Indonesia is categorized as a sustainable development country, automatically requires cement as a basic material for construction, especially for infrastructure development. PT. Holcim Indonesia, Tbk (a public company) has been active for infrastructure development in national and international markets. PT. Holcim Indonesia, Tbk is majority owned and managed by a company named Holcim Group which is domiciled in the State of Switzerland. The totally permanent employees of PT. Holcim Indonesia, Tbk currently has approximately 2500 person (consisting of directors, managers, supervisors and members). Since 2015 PT. Holcim Indonesia, Tbk has changed its organizational structure. The company several times by recruiting employees from outside on the grounds of obtaining employee job satisfaction. Job satisfaction is a very interesting conversation for people who work in organizations and people who study it (Lu et al., 2005:211). Job satisfaction is meaned as an emotional state that results from the assessment of one's work (Namasivayam & Zhao, 2007: 1218). Factors that affect job satisfaction were job security, communication and work environment (Radhika, 2018:2). According to research (Miha et al., 2011:773), job satisfaction does have an effect on loyalty to the organization. PT.Holcim Indonesia, Tbk has the main factor causing the decrease in employee job satisfaction is the reduced number of employees (including outsourcing employees), so that many types of work do not support work activities and also many work facilities are reduced to obtain cost efficiency. This causes the work environment to be uncomfortable also.

On May 2015 many employees were layoffs, and company removed the promotion program (*Organization Performance Improvement-OPI*) because the training system for employees uses digital training methods. These training is not a promotion program, while the OPI program is a promotion program in which one of the work plans requires training for employees. This is the beginning of the decline in job satisfaction. After that the company also limits the work facilities and infrastructure of employees. This also has an effect on decreasing employee communication where communication work tools such as pulses, operational vehicles, office supplies, and others are limited. Due to the arbitrary layoffs of employees and an uncomfortable work environment, smooth communication and promotion system (OPI) elimination, it has decreased job satisfaction and a peak in employee demonstrations. Annual employees bonus acquisition scheme (2015 to 2018) was reduced by reasons of efficiency. That is increase employee dissatisfaction, so many resigned from the company. Based on annual report, the company losing for 3 years in a row as effect of employee dissatisfaction. The peak (February 2019) company divested to by the Semen Indonesia group. The company changed its name to PT.Solusi Bangun Indonesia, Tbk (SBI).

Based on 2017 survey showed that work satisfaction and work environment of the employees of PT Holcim Indonesia, Tbk were minimum percentage. Employee promotion, and communication also showed decreased. It there are problems that need to be investigated. Promotion, good communication, and smooth work environment are all factors in employee job satisfaction so that company will growing up.

The problem study formulation as follows:

1. Does job promotion directly effect on job satisfaction?
2. Does communication directly effect on job satisfaction?
3. Does work environment directly effect on job satisfaction?
4. Does job promotion directly effect on work environment?
5. Does communication directly effect on work environment?
6. Does job promotion effect on job satisfaction through the work environment?
7. Does upward downward communication effect on job satisfaction through the work environment?

Literature Review

Job Satisfaction

Job satisfaction is an attitude (cognition-action), a feeling of pleasure (affection-expression), or a gap (gab) between what has been obtained and what is expected. The happy attitude shown by someone at work is an expression because what is his responsibility has been carried out well and is satisfied with the results of his work. Conversely, if someone at work is not supported by adequate work equipment, a work environment that is not conducive, and low attention from the leadership, then it will lead to job dissatisfaction. Herzberg's Two Factor theory were about cause job satisfaction (motivators) and cause job dissatisfaction factors (hygiene factors). The hygiene factors are company policies, supervision, interpersonal relations, work conditions, salary, statute, and job security. The motivators were achievement, recognition work itself, work conditions, responsibility, advancement, and growth (Aziri, 2011:77)

There are four ways employees express dissatisfaction (Robbins & Judge, 2013:216) : exit (behavior to leave the organization including finding a new position and resigning), aspirations-voice (trying to improve conditions, including providing advice repair, discuss problems with superiors and trade union activities), loyalty-passive but optimistic (including defending the organization), and neglect (passively allowing the situation to get worse, including absenteeism or continual delays, lack of effort and increased error rates)

Employees who work diligently and have a positive attitude will generally show a high level of job satisfaction and vice versa. The involvement and feeling needed in solving various work problems will bring employee satisfaction at work.

Based on description above, research concluded that job satisfaction is a person's view, both positive and negative, of the results of the evaluation of the task that has been carried out and condition was compared to the reward with indicators: managerial assignments, relationships with colleagues and the adequacy of rewards.

Job Promotion

According to Gopinath, R (2016:277), promotion is upward movement in present job leading to greater responsibilities, higher status and best salary. In general, promotions are followed by an increase in income and other facilities. Rewards for performance results are usually expressed in the form of promotions. An employee views a promotion as the most attractive thing compared to other compensation this is because the promotion is permanent and valid for a long period of time. The term promotion means advancement, where a promotion can occur when an employee is promoted from a lower position to a higher position. Increases in salary and responsibilities usually accompany promotions.

Promotion was happened when an employee makes upward changes in the organizational hierarchy and moves to a more responsible place (Dessler, 2014 :292). Promotion absolutely can create a significant increase in an employee's salary as well as authority and control. These will help competitors to identify the most productive employees in the business world at the same time as employees who are recognized by their own organizations.

Based on explanation above, it can be concluded that job promotion is the progress of a productive employee to another job (demands greater responsibility), best salary and status, prestige, opportunities, and challenges, as well as higher authority, with indicators are honesty at work, suitability of education, undertaken task, and work success.

Communication

Regarding etymologically, communication comes from Latin, which is cum, means with or together with, and word units, means one. Two words form the communion noun, which in English was called communion, which means togetherness, unity, union, or relationship. Communication is the process of delivering information (verbal and non-verbal) from one party to another party that aims to get mutual understanding

Upward communication was information sent from subordinates to leaders (Barker & Gaut, 2010:10). This communication model serves a variety of needs: often used by employees to communicate valuable information to management. This direction of communication enables employees to express their concerns to company management. Meanwhile according to Tubbs & Moss (2008:25), downward communication was a form of communication initiated by the organization top management; and it goes down mediating the "chain of command". The organization was owed as the task of initiating various channels of communication to reduce tensions and explain policies and procedures clearly. Work instructions, organizational procedures, individual expectations and evaluations, training and company propaganda are examples of decreased communication.

According to Velentzas & Broni (2017:117), upward downward communication was communication consisting of downward communication and upward communication. The downward communication is communication made by company leaders and bequeathed a hierarchy of organization workers while upward communication was communication which can increase motivation and make employees feel valued and respected while allowing managers to understand employee feelings. Furthermore, if problems arise, they were more likely to be identified earlier by those who work closely in the area where they occurred.

Based on the results of description above, it can be concluded that the upward downward communication is communication that occurs between superiors to leaders or vice versa, both formally and informally. It can be in the form of task instructions, task implementation, regulatory information, employee motivation, work information, suggestions, complaints, ideas for organizational improvement, reporting activities such as raw materials, production, distribution and so on, which work progress affect with its indicators: giving information openly, participating in feeling difficulties, giving support, and giving positive responses.

Work Environment

The concept of work environment is an environment that physical addresses, psychological and social aspects. The work environment has positive and negative effects on the employees psychological and welfare.

According to Jain & Kaur (2014:1), work environment can be described as the people work environment. However, all aspects of the work environment are the same or very appropriate when it is considered job satisfaction and affects employee welfare too. Employees were an important component in the process of achieving the mission and business vision. Employees must meet work progress criteria set by the organization to ensure their work quality. To meet organizational standards, employees need a work environment that allows them to work freely on no problems that can hold them from performing to their full potential. Still according to Jain, the work environment can be divided into three important components namely, physical environment (ventilation & temperature, noise, infrastructure & interior, facilities; mental environment (fatigue, boredom, monotonous attitudes & behavior of supervisors & colleagues); social environment (employees develop intelligence belonging to their group). The special basis of this cluster significantly affects attitudes and behavior of individual employees.

Regarding to results of explanation above, it can be concluded that the work environment is a condition in which a person or group of people performs their tasks (directly or indirectly). It can affect themselves and their work while working to achieve organizational goals with the indicators: work, facilities completeness and infrastructure, work pressure, work safety, and working comfort.

Based on framework described above, the following hypotheses can show:

- H1: There is a positive direct effect of job promotion on job satisfaction.
- H2: There is a positive direct effect of communication on job satisfaction.
- H3: There is a positive direct effect of the work environment on job satisfaction.
- H4: There is a positive direct effect of the job promotion on work environment.
- H5: There is a positive direct effect of communication on the work environment.
- H6: There is a positive indirect effect of job promotion on job satisfaction through the work environment.
- H7: There is a positive indirect effect of communication on job satisfaction through the work environment.

Method

This study was conducted at PT. Holcim Indonesia, Tbk, located in all the factories and surrounding Indonesia areas, namely the Narogong Factory, the Cilacap Factory, the Tuban Factory, and the Lhok Nga Factory (Aceh). The research was conducted for approximately 7 (seven) months, starting from December 2018 until July 2019.

The method used was a quantitative method (survey research). The selection of this method was based on the consideration that the research involved four variables whose data came from the same group of respondents and answered each questionnaire question posed simultaneously (same time). The question item consists of 5 (five) alternative answers, are a) Very Frequently; b) Often; c) Rarely; d) Very rarely; e) Never. Scores for these research answers are 5,4,3,2 and 1 for positive statements and scores 1,2,3,4 and 5 for negative statements, respectively, and each of these variables has a range of 20 - 120. The study approach with this quantitative method used to analyze

the effect of several independent variables used on the dependent variable. Data analysis used is the *Structural Equation Modeling* (SEM) analysis approach (Wulandari & Murtianto, 2017:51).

This research will examine the relationship between research variables, and measured the effect of one variable with other variables. In this research there are four variables that will be examined, namely the variables of job satisfaction, job promotion, communication, and work environment. The research design is presented in the Figure below.

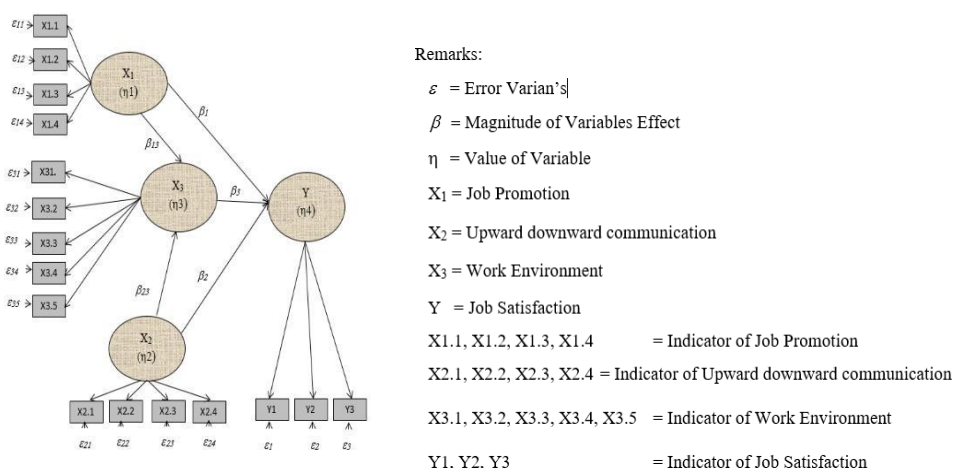


Figure 1 Research Design Model

In this research the population is permanent employees of PT. Holcim Indonesia, Tbk is a subsidiary, which at the time of the study, the total number was 360 persons who have worked more than 10 years (position of member to manager). Other time, to maintain the representative of the research sample, the precision value is taken at 5%, so by using the Slovin formula (Putra & Welly, 2015:903), a total sample of 190 persons is obtained.

The sampling technique in this research uses Proportional Random Sampling Technique where the researcher requires the sampling of each sub-population by calculating the size of the sub-population and mixing subjects in the population so all subjects are considered the same.

Before the questionnaire is used to obtain data, it is necessary research do a trial run first. The test instruments used in this research were the validity and reliability tests. Both instruments were tested using the SEM Lisrel software. This trial directly uses 190 persons respondents because this trial is an evaluation of the suitability of the model using a factor analysis of each variable so that it will look the effect of the weight of each indicator. The instrument preparation test consists of two namely the test of the suitability of the measurement model and the structural model. The measurement model purposes to get a construct or latent variable that is fit so that it can be used for the next stage of analysis. To get a construct is fit, a CFA (*Confirmatory Factor Analysis*) test was used. CFA is based on the reason that the observed variables are particular latent variable imperfect indicators that is the underlying. CFA was one of the two main approaches in factor analysis. While the structural model analysis purposes to get the most fit or feasible structural model for the Goodness of Fit (GOF) test (Haryono, 2016:30). There were two techniques for constructing variables, one level method (first order) and two-level method (second order). Variables that are measured directly with the indicators it develops, were called the first order method. Whereas the variables measured through the dimensions and the new indicators, were called the second order method. In this research using the development of theory-based variables with the first order method.

Findings

Results of Respondents and Indicators Descriptive

Based on the SPSS results, it can be obtained descriptively based on the frequency and percentage of demographic characteristics of the respondents as many as 190 persons respondents can be seen in the table below:

Table 1 Descriptive of respondent characteristics

Respondent Description		Frequenc	
		y	%
Gender	Male	178	93.7
	Female	12	6.3
Experience Working	>10 to 15 years old	51	26.8
	>15 to 20 years old	16	8.4
	> 20 to 25 years old	83	43.7
	> 25 to 30 years old	39	20.5
	>30 years old	1	0.5
Positions	Manager	25	13.2
	Supervisor/Leader	36	18.9
	Member	129	67.9

The gender of a total of 190 persons respondents who have more than 10 years' experience is dominated by male respondents as many as 178 people or 93.7% and those who are female are only 12 people or 6.3%. This can be explained because the population is indeed more 90% men > women.

Based on the working experience of respondents dominated by > 20 to 25 years as many as 83 respondents or 43.7%, respondents whose tenure of > 10 to 15 years were 51 people or 26.8%, respondents whose tenure of > 25 to 30 years were 39 people or 20.5%, respondents whose working experience > 15 to 20 years were 16 people or 8.4%, and respondents who have > 30 years of work are 1 person or 0.5%.

Based on the position, the biggest respondents came from non-managers (grade 1 to grade 8) as many as 129 person or 67.9%, supervisory positions (grade 9 to grade 12) as many as 36 person or as much as 18.9% and managerial positions as many as 25 people (grade 13 up to grade 15) or by 13.2%.

While this study of indicator characteristics of each variable (job satisfaction, job promotion, communication, and work environment) are shown below.

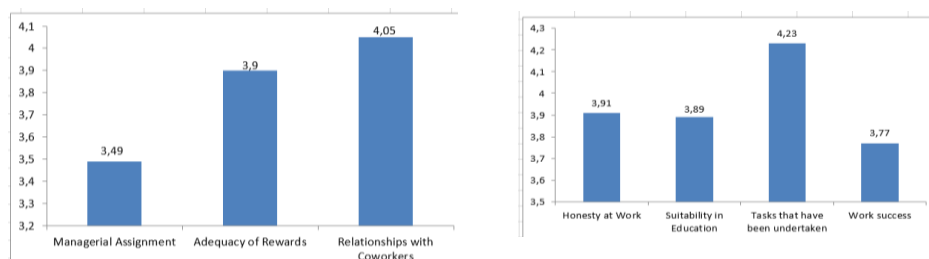


Figure 2 Job Satisfaction average indicator

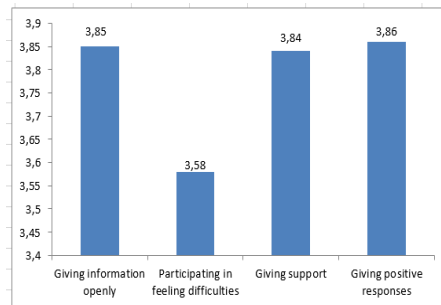


Figure 3 Job Promotion average indicator

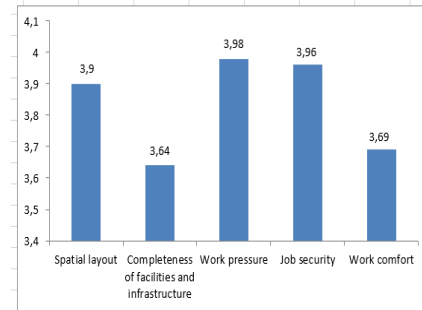


Figure 4 Communication average indicator

Figure 5 Work Environment indicator

From Figure 2 shown that the average score of the indicators of the highest Job Satisfaction variable is Relationship with Coworkers of 4.05, the next is the Indicator of Adequacy Rewards of 3.9, and the last is the Managerial Assignment indicator of 3.49.

Figure 3 shown that the average score of the indicators of the highest Job Promotion variable is the Task that has been undertaken by 4.23, the next is the indicator of Honesty at Work by 3.91, the indicator of Education Suitability of 3.89, and the last is the indicator of Work Success of 3.77.

Figure 4 shown that the average score of indicators of upward downward Communication variable is the highest Giving a positive response of 3.86, the next indicator is Giving information openly of 3.85, the indicator of giving support is 3.84, and the last is the Participating in feeling difficulties of 3.58

Figure 5 shown that the average score of indicators of the highest Work Environment variable is Work Pressure of 3.98, the next is Job Security indicator of 3.96, Spatial Layout indicator of 3.9, Work Comfort indicator of 3.69, and Completeness indicator Facilities and Infrastructure of 3.64.

Results of Measurement Model Analysis

The measurement of model analysis is performed for each variable of X1, X2, X3 and Y, using the *Structural Equation Model* analysis. It shown that CFA (Confirmatory Factor Analysis) calculation on the Job Promotion Variable show that the validity test for all instruments has a value of $t > 1.96$ and a loading factor > 0.50 , then this instrument is valid. The value of RMSEA: $0.067 < 0.08$ is categorized as fit. Study reliability was obtained by calculating the value of Construct Reliability (CR) and the value of Variance Extracted (VE) of the indicators (honesty at work, suitability of education, tasks that have been undertaken, and work success). The research results of all the indicators obtained CR values > 0.7 and VE values > 0.5 . This study means that the reliability value is reached. Because this measurement model was valid and reliable, the Job promotion variable including all the indicators could be carried out at the structural model analysis stage.

CFA calculation results in communication variables shown that the validity test for all instruments has a value of $t > 1.96$ and a loading factor > 0.50 , then this instrument is valid. While these value of RMSEA: $0.062 < 0.08$ is categorized as fit. CR values > 0.7 and VE > 0.5 for all communication indicators (giving information openly, participating in feeling difficulties, giving support, and giving positive responses). This means the reliability value was reached. Because this

measurement model is valid and reliable, the Communication variable including all the indicators can be carried out at the structural model analysis stage.

CFA calculation results on the Work Environment Variables shown that the validity test for all instruments has a value of $t > 1.96$ with a loading factor > 0.50 , then this instrument is valid. While the value of RMSEA: $0.07 < 0.08$ is categorized as good fit. CR values > 0.7 and VE > 0.5 for all work environment indicators (spatial layout, completeness of facilities & infrastructure, work pressure, job security, and work comfort). This means the calculation reliability value is reached. Because this measurement model is valid and reliable also, the Work Environment variable including all the this variable indicators can be carried out at the structural model analysis stage.

CFA calculation results on the Job Satisfaction Variable shown that the validity test for all instruments has a value of $t > 1.96$ with a loading factor > 0.50 , then this instrument is valid. While the value of RMSEA: $0.066 < 0.08$ is categorized as good fit. CR values > 0.7 and VE > 0.5 for all this variable indicator (managerial assignments, reward adequacy, relationship with coworkers). This means the reliability value is reached also. Because this measurement model is valid and reliable too, Job Satisfaction variables including all this variable indicators can be carried out at the structural model analysis stage,

Results of Structural Model Analysis

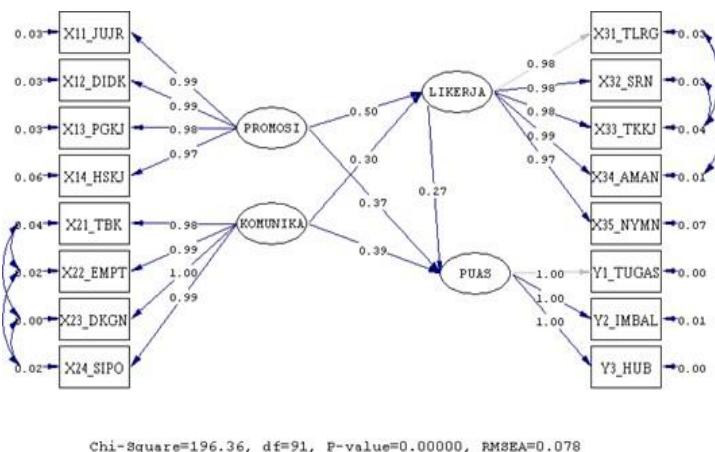


Figure 6 Loading Factor Structural Model Diagram

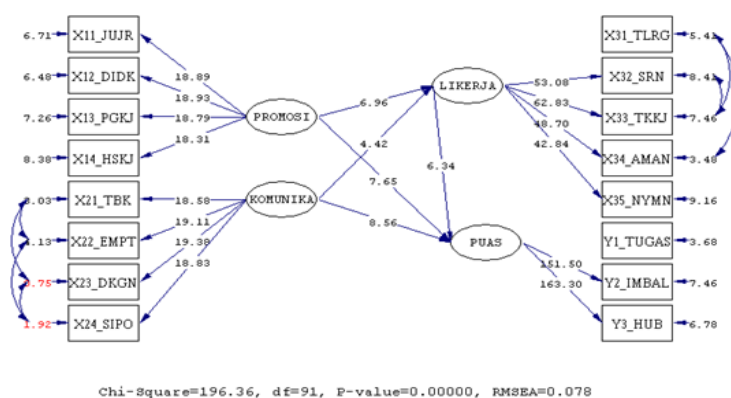


Figure 7 T-value Structural Model Diagram

From Figure 7 shown that all T-values are calculated for all constructs (job promotion, communication, work environment, and job satisfaction) > 1.96 so this structural model is called valid.

Whereas in Figure 6 shown that the loading factor values for all indicators > 0.5 can be categorized as fit analysis. The results of the model suitability test (Gof-Good of Fit) in full from the latent variables of job promotion, communication, work environment, and job satisfaction can be seen in Table 2.

Table 2 Good of Fit Test Results (Suitability Model)

Number	Criteria	Cut of value	Test Result	Remarks
1.	Chi Square/df	< 3	2.16	Good Fit
2.	RMSEA	≤ 0.08	0.078	Good Fit
3.	CFI	≥ 0.9	0.99	Good Fit
4.	RFI	≥ 0.9	0.98	Good Fit
5.	AGFI	≥ 0.9	0.83	Marginal Fit
6.	NNFI	≥ 0.9	0.99	Good Fit
7.	Degree of freedom	> 0	91	Good Fit
8.	Loading Factor (LF)	> 0.5	All of LF: > 0.5	Good Fit

The results of the Goodness of Fit test shown in Table 4, that all the requirements criteria have met the cut-of value (Good Fit) so that the model is worthy of further analysis, unless the AGFI criteria meet the Marginal Fit criteria. The AGFI criteria were still worthy of further analysis.

Results of Hypothesis Testing

After testing the measurement model and structural model finished, research result shown full SEM processing with standardized solutions to be able to find out the hypothesis test results of the relationships that exist in the construct as follows:

Table 3 R² Result

Variables name	R ²	P-value
Work Environment (X ₃)	0.54	0.036
Job Satisfaction (Y)	0,84	0.026

Table 4 Calculation of Indirect Effects of variables Results

Constructs name	Value of Effect	T-estimate	P-Value	Hypothesis
Job Promotion (X ₁) → Job Satisfaction (Y) through Work Environment (X ₃)	0.14	44.13	0.002	H0 rejected
Communication (X ₂) → Job Satisfaction (Y) through Work Environment (X ₃)	0.08	28.02	0.001	H0 rejected

Table 5 Calculation of Direct Effects of variables Results

Constructs name	Value of Effect	T-estimate	P-value	Hypothesis
Job Promotion (X ₁) → Job Satisfaction (Y)	0.37	7.65	0.046	H0 rejected
Job Promotion (X ₁) → Work Environment (X ₃)	0.50	6.96	0.034	H0 rejected
Communication (X ₂) → Job Satisfaction (Y)	0.39	8.56	0.017	H0 rejected
Communication (X ₂) → Work Environment (X ₃)	0.30	4.42	0.049	H0 rejected
Work Environment (X ₃) → Job Satisfaction (Y)	0.27	6.34	0.043	H0 rejected

Table 3 shown that the R-squared (R²) value was 0.54 (54%) for the work environment variable, and 0.84 (84%) for the job satisfaction variable. Meaning Results R² is the effect of job promotions and communication together by 54% of work environment, as well as the effect of job promotions, communication, and work environment together at 84% on job satisfaction. These models indicate quite well categorized because this study has primary data and is a cross section.

The structural equation of the effect of job promotion and communication on the work environment is formulated as shown:

$$\text{WORK} = 0.50 * \text{PROMOTION} + 0.30 * \text{COMMUNICATION},$$

Error variance = 0.46, R² = 0.54

Error variance is another variable that is not examined. While the structural equation effect of job promotion, communication, and work environment on job satisfaction was formulated as shown:

$$\text{SATISFIED} = 0.27 * \text{WORK} + 0.37 * \text{PROMOTION} + 0.39 * \text{COMMUNICATION},$$

Error variance = 0.16, R² = 0.84

From Table 5 shown that the magnitude of the direct effect of job promotions on job satisfaction was 0.37 (37%). The magnitude of the effect of job promotions on the work environment was 0.5 (50%). The direct effect of upward downward communication on job satisfaction was 0.39 (39%). The magnitude of the effect of upward downward communication on the work environment was 0.3 (30%). And the magnitude of the effect of the work environment on job satisfaction was 0.27 (27%)

From Table 4 shown that the value of the indirect effect of job promotion variables on job satisfaction can be obtained from: multiplication of the factor value of the effect of job promotion variables on work environment variables of 0.5 with the factor value of the effect of work environment variables on job satisfaction variables of 0.27. So, the amount will be count $0.5 * 0.27 = 0.14$ (14%). This research means that there is an indirect effect of job promotion variables on job satisfaction by 0.14 (14%). While the magnitude of the indirect effect of upward downward

communication on job satisfaction was $0.3 \times 0.27 = 0.08$ (8%). This means shown that there is an indirect effect of communication variables on job satisfaction by 0.08 (8%).

The Effect of Job promotion on Job Satisfaction consists of a Direct Effect of 0.37 and an Indirect Effect result of 0.14. So that if added together, the Effect of Job promotion on Job Satisfaction was 0.51. While the Effect of communication on Job Satisfaction consists of a Direct Effect was 0.39 and an Indirect Effect was 0.08. So, if added together, the Effect of Communication on Job Satisfaction was 0.47. This means that the Work Environment variable contributes a positive effect between the Job promotion variable on Job Satisfaction and also communication variable on Job Satisfaction. As well as work environment variables directly also affect Job Satisfaction was 0.27. Thus, the Work Environment variable acts as an Intervening variable.

With the above results, it can be concluded that all the initial hypotheses (7 types) of this study were proven to be true and significant.

Job Promotion Has a Positive Effect on Job Satisfaction

From Table 7 shown that the magnitude of the direct effect of Job Promotions on job satisfaction is 37%. The findings of these study indicate that Job Promotions have a positive effect on job satisfaction. These positive effect shows that Job Promotions that are often obtained by employees will have implications for increasing employee job satisfaction.

Every employee waits for a promotion because a promotion means trust and recognition of an employee's abilities and abilities in working for a higher and best position. Employees who were promoted must have good quality human resources, but in reality, there was a problem that occurs within the company regarding the promotion of positions resulting in decreased job satisfaction.

Same with research of Fathoni, (2006), that promotion was a positive development of an employee because his job is considered good by the authorized officials. Therefore, giving higher responsibility and authority should be given to those who excel

The results of this research conducted according to Andini et al. (2013), which in accordance with the aspects of fairness, good promotion gives a positive and significant effect also on employee job satisfaction. Employees will feel that they are cared and happy for and treated well so they work with pleasure. Job satisfaction was job satisfaction that is enjoyed in work by obtaining praise of work results, placement, treatment, equipment, and good working environment. Employees who prefer to enjoy job satisfaction, will prioritize their work rather than rewards even though remuneration is important.

Based on these explanations, it could be concluded that the results of this study support previous findings about the direct effect of Job Promotions on employee job satisfaction.

Communication Has a Positive Effect on Job Satisfaction

From Table 7 shown that the magnitude of the direct effect of communication on job satisfaction was 39%. The findings of these research indicate that communication positively effects job satisfaction. These positive research effect shown that communication will have implications for increasing employee job satisfaction.

Effective communication was very important for the success goal of an organization's work. In fact, it seems clear that communication was the key to all employee interpersonal activities. Communication was the process of conveying meaning from a person to another or from a formal organization to individual employees. This also applies to the employee communication.

Based on these explanations, it can be concluded that the results of this research support previous findings about the direct effect of communication on employee job satisfaction.

Work Environment Has a Positive Effect on Job Satisfaction

From Table 7 shown that the magnitude of the direct effect of the work environment on job satisfaction was 27%. The research findings of this study indicate that the work environment

has a positive effect on job satisfaction. This study positive effect shows that a conducive work environment will have implications for increasing employee job satisfaction.

Important factors in the work environment that must be considered design and age of the building, workplace layout, work station arrangement, quality and design of furniture and equipment, space, temperature, ventilation, lighting, noise, vibration, radiation, and air quality (Salunke, 2015).

The results of this research are reinforced by study conducted by Agbozo et al. (2017), where the findings of his study show that most of the staff at the bank are satisfied with their work environment especially the physical atmosphere. This study concludes that the environment has a significant effect on employee satisfaction. The findings of this research emphasize the need for management to improve the work environment of employees to improve job satisfaction. An organization that has good work facilities, a quiet and pleasant work environment will add work concentration so also that job satisfaction will increase as well. The work environment at PT. Holcim Indonesia, Tbk must be addressed immediately so that employees are comfortable, safe and evenly distributed to all employees (member until manager level) so that job satisfaction increases.

Based on these explanations, it can be concluded that the results of this research support previous findings about the direct effect of the work environment on employee job satisfaction.

Job Promotion Has a Positive Effect on Work Environment

From Table 7 shown that the magnitude of the direct effect of job promotions on the work environment was 50%. The findings of this research indicate that job promotions have a positive effect on the work environment. This positive effect shows that employee job promotions that are often done will have implications for a conducive and pleasant work environment. Employee job promotion is highly awaited because employees will not only increase benefits, but positions even increase the comfort level of the work environment. Of course, the higher the promotion given to all employees, the better the work environment will get.

Employees who get promotion in PT. Holcim Indonesia, Tbk will receive better facilities than before so that it automatically feels an improvement in the work environment, especially if it is promoted to become a member level until general manager or other higher position. Forms of improvement in the work environment such as receiving transportation allowances (car allowance), a very comfortable work space, having a secretary, and other. A conducive and comfortable environment in a company will benefit the company (internal and external management).

Based on above explanations, it can be concluded that the results of this research support previous findings about the direct effect of job promotions on the work environment.

Communication Has a Positive Effect on Work Environment

Regarding to Table 7 shown that the magnitude of the direct effect of upward downward' communication on the work environment is 30%. The findings of this research indicate that communication has a positive effect on the work environment and is in accordance with the findings of previous relevant research findings. These positive effects indicate that communication will have implications for improving employee work environment. These positive effect shows that communication that is often carried out and planned will have implications for a conducive and comfortable employee work environment.

Communication was often considered trivial in a division or directorate. Many superiors or leaders or top management often assume that if all employees who already have a job description then assume the communication that occurs in the organization is going well and no problem later. Communication at PT. Holcim Indonesia, Tbk is now reduced, stiff and only as a matter of certain jobs (uncomfortable and not smooth communication). The attitude of giving information openly, participating in feeling difficulties, giving support and giving positive responses no longer exists so it could result in work done by superiors and those carried out by employee subordinates disturbed.

Based on these explanations, the results of this research support previous findings about the direct effect of communication on the work environment.

Job Promotion Has a Positive Effect on Job Satisfaction Through Work Environment.

From Table 6 shown that the value of the indirect effect of job promotion variables on job satisfaction was 14%. The findings of this study indicate that employee job promotions have a positive effect on job satisfaction through the work environment (the indirect effect of job promotions on employee job satisfaction).

The positive effect of employee job promotions at PT Holcim Indonesia, Tbk through the OPI program is very clear and beneficial for employees when working. When the employee finishes implementing the OPI program, the employee has the comfort and safety of the employee work environment that increases as well. Employees will move up, have adequate facilities, and compensation benefits are well also. When the employee work environment improves it will have a positive effect on job satisfaction where job satisfaction will increase as well.

Based on above explanations, the results of this research support previous findings about the effect of job promotions on job satisfaction through the work environment.

Upward downward communication has a Positive Effect on Job Satisfaction through Work Environment.

From Table 6 shown that the indirect effect value of upward downward communication variables on job satisfaction was 8%. The research findings indicate that employee communication positively effects job satisfaction through employee work environment (indirect effect of upward downward communication on employee job satisfaction).

Communication was the process of exchanging views, ideas, opinions and suggestions between one person or more from an organization. Communication is a very important element of organization business success. Communication was a function of the management process. When employee communication was absent from top management to low level management, the organization will not or will not be effective.

The effect of employee communication on job satisfaction is stronger if it is not only used as a moderator but as a main predictor in a job. Moreover, it was supported by intensive and good communication between superiors and subordinates. Communication as predictors is very supportive to increase the effect of promotions received by employees so as to create optimal employee job satisfaction. Thus, the company's productivity will increase as the variable employee job satisfaction is achieved.

The effect of the biggest indicator for the variable employee Job Satisfaction is the relationship with colleagues, the biggest indicator for the Job promotion variable is the task ever undertaken, the biggest indicator for the Communication variable was giving a positive response, and the biggest indicator for the employee Work Environment variable is work pressure.

Based on above explanation above, it can be concluded that the results of this research support previous findings about the effect of job promotion, communication and work environment on job satisfaction at PT Holcim Indonesia, Tbk. This research also supports previous findings about the work environment that are intervening variables.

Conclusion

Job promotion, communication, and the work environment together and partially have a positive and significant effect on employee job satisfaction. Increasing job promotions, communication together will increase job satisfaction for employees at PT Holcim Indonesia, Tbk also with a contribution value of 0.84 (84%). While the remaining 0.16 (16%) is another contribution not included in this study model. The most influential variable on employee job satisfaction is communication with the most dominant indicator being positive responses. While

the most dominant indicator forming the employee job satisfaction variable is the relationship with coworkers.

Job promotion has a positive and significant effect on job satisfaction through employee work environment variables. Increased job promotions will increase employee job satisfaction through employee work environment variables at PT. Holcim Indonesia, Tbk. The most dominant indicators in shaping employee job promotion variables are indicators of the tasks that have been undertaken and the most dominant indicator in shaping the work environment is work pressure. While the most dominant indicator forming the employee job satisfaction variable is the relationship with coworkers.

Communication has a positive and significant effect on employee job satisfaction through the work environment of employees. Improving communication will increase employee job satisfaction through employee work environment variables at PT Holcim Indonesia, Tbk. The most dominant indicator in forming employee communication variables is giving positive responses and the most dominant indicator in shaping the work environment is work pressure. While the most dominant indicator forming the employee job satisfaction variable is the relationship with coworkers. Another important finding from the results of this research is that work environment variables act as intervening variables.

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The Effect of Gender Diversity, Board Composition, and Leverage on Firm Performance

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Abstract: The purpose of this study was to analyze the influence of gender diversity, board of directors, board of commissioner, independent commissioner, and leverage on firm performance. The population in this study is all property and real estate sector companies listed on the Indonesia Stock exchange for the period 2016-2020. Sampling in this study using purposive sampling, then obtained a sample of 175 (35 companies x 5 years). The type of data used is secondary data which is taken using the documentation. The data analysis technique used is multiple linear regression analysis. The results showed that gender diversity, board of commissioners, and independent commissioners had no effect on firm performance with significant values > 0.05 , namely 0.345; 0.088 and 0.153. Meanwhile, the board of directors and leverage affect the firm performance with a significant value < 0.05 , namely 0.005 and 0.000.

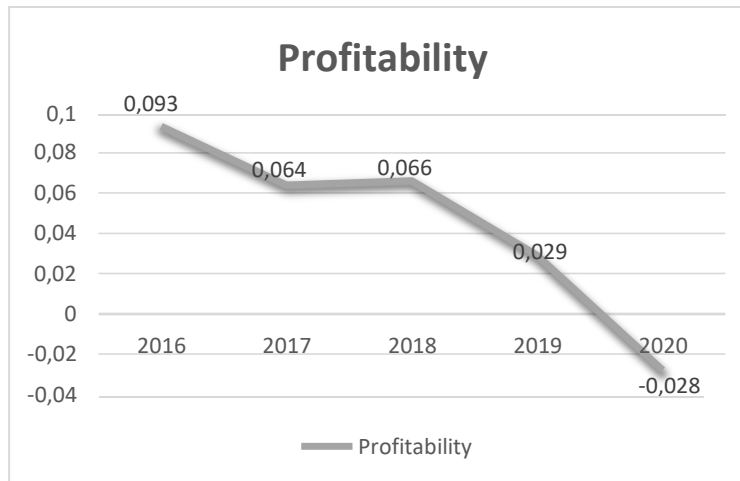
Keywords: Gender Diversity, Board Composition, Leverage, Firm Performance, Property and Real Estate.

Introduction

The property and real estate sectors are considered to have an important role in contributing to national economic growth. In fact, this sector is believed to be able to become a benchmark for economic growth one day. Deputy Minister of Finance Indonesia, Suahasil Nazara stated that the construction and real estate sectors are the sectors that have the highest multiplier effect, this sector has an important role in efforts to recover the national economy (Ministry of Finance, 2022).

For management, it is very important in assessing the company's financial performance to find out the company's current position compared to competing companies. If the company's financial performance is not good or low, it will affect the assessment of investors and creditors, causing low funding. This condition will certainly have a negative impact on the company, such as a threat to the sustainability of the company.

Firm performance is one of the most important aspects of the company's success. However, based on JCI data written by Prima & Rahmawati (2020), it is stated that the property and real estate sector experienced the worst performance, which was down 34.21%, which was then followed by the agricultural sector which fell 31.26%. Hery (2015) stated that the main focus of financial reporting is information on the company's financial performance provided by the size of the profit and its components (income, expenses, gains, and losses). Furthermore, Toni, Simorangkir, & Kosasih (2021) stated that profitability ratios are used to measure the efficiency of using assets or sales results as well as measuring firm performance. In this case it is known that the profitability of property and real estate companies is as follows:



Source: Data processed by author (2022)

Figure 1. Average Profitability of Property and Real Estate

Based on the data from figure 1 above, it can be explained that the profitability of property and real estate companies in 2018-2020 decreased. Declining profitability can certainly worry investors for their investment in this companies. The reduced profit of the company will have an impact on reducing the income of investors from their investment in property and real estate companies. If this happens continuously, then investors will become afraid and of course will withdraw their funds from the company and as a result the company will lack capital to run the company's operations which in the end the company will experience losses and even bankruptcy. Therefore, it is necessary to conduct research or study on the occurrence of these problems in order to obtain efforts to improve the achievement of the company's profitability.

Various factors might be responsible for firm performance, such as a growth, financial leverage, working capital, firm size, owners and managers. The agency theory perspective is the basic theory used to understand good corporate governance, which explain the relationship between management and owners. One of the important mechanisms in good corporate governance that can affect the company's performance is gender diversity. There is growing evidence that firms with greater gender diversity tend to be more innovative and profitable. Carter (as cited in Paoloni & Lombardi, 2020) stated that gender diversity can have a positive impact on the board's monitoring quality because women are considered more unrelated than men and this leads to a decrease in agency cost, improving the financial performance.

Many studies have documented a positive relationship between board gender diversity and firm performance such as research by Ferrary & Déo (2019), Gunawan, Murhadi, & Utami (2019), Linggih & Wiksuana, (2018). However, there are also other studies that support the absence of influence between gender diversity and firm performance, namely research conducted by Marinova, Plantega, & Remery (2010), Mirza, Mahmood, Andleeb, & Ramzan (2012), Wicaksono (2019).

Another factor that affects the firm performance from the perspective of corporate governance is a board composition. According to Taylor & Francis (2019) board composition, refers to the size of board membership and proportion of inside to outside director and it also concern issues relating to board independence (including independence of board committees). Board composition is one of the most significant components of corporate governance because it plays very crucial role in determining the governance strategy at any firm (Bijalwan & Joshi, 2020).

In accordance with research conducted by McIntyre, Murphy, & Mitchell (2007), Rahman & Saima (2018), Khalid, Khan, Ehsan, Akram, & Ahmad (2018) conclude that board composition has a positive effect on firm performance. In contrast, from the results of research conducted by Postma, Ees, & Sterken (2001), Mandala, Kaijage, Aduda, & Iraya (2017) the board composition has no effect on the firm performance.

According to Misbahudin (2015) one of the factors that affect profitability is the total cost. Costs can arise when a company uses debt for its operations. Leverage is one of the financial ratios that shows the extent to which the company's assets have been financed by debt. Leverage is an important tool in measuring the use of company debt. By using leverage, companies can not only earn profits but can also cause companies to experience losses. Rudianto (based on data from Bank Indonesia (as cited in Sunarsip, 2021) it is stated that there is an increase in DER and DAR in property and real estate companies listed on the IDX.

Several studies which conclude that leverage has an effect on company performance are research conducted by Evgeny (2015), and Sabila (2017). However, there are also several studies which state that leverage does not affect company performance such as research conducted by Wibowo & Wartini (2012), Rizki & Idawati (2018).

Based on the background description that has been described previously, it can be seen that there is still a research gap phenomenon in previous studies regarding the variables of gender diversity, board composition, and leverage on firm performance. Thus, the authors are interested in researching the influence of gender diversity, board composition, and leverage on Firm Performance.

This paper is structured as follows. Section 2 discusses the theoretical about gender diversity, board composition, leverage and firm performance. Section 3 describes the sample, data, and methodology used. Then a description of the findings is given in section 4. Finally, the paper reports the results, discusses the main findings, and draws conclusions.

Literature Review

a. Agency Theory

Agency theory is a principle that is used to explain and resolve issues in the relationship between business principals and their agents. Most commonly, that relationship is the one between shareholders, as principals, and company executives, as agents (Kopp, 2021). The agency theory concerns the separation of ownership and control in organizations. Eisenhardt (as cited in Maria Nindya Kirana, 2016) stated that agency theory is based on several assumptions. These assumptions are divided into three types, namely: about human nature, organizational assumptions and information assumptions. Assumption of human nature emphasizes that humans have self-interest have limited thinking power regarding the perception of the future (bounded rationality), and Humans always avoid risk (risk-averse). The organizational assumption is that there is conflict between members of the organization, efficiency as a criterion of effectiveness and the existence of information asymmetry between principals and agents. Based on the assumption of basic human nature, it is explained that each Individuals are motivated solely by their own interests, causing conflict.

This agency theory perspective is the basic concept of corporate governance which is expected to function to provide assurance or confidence to investors that managers will benefit them. In short, the existence of corporate governance can reduce or reduce agency conflict between managers and shareholders. According to Rezaee (2007), corporate governance can also be defined in the context of the agency theory, as a process designed to align interest of management (agent) with

those of shareholders (pincipals), and to hold management accountable to the company's equity owners.

b. Gender Diversity

Gender is a cultural conflict that refers to the characteristics that distinguish between women and men both biologically, behaviorally, mentally, and socio-culturally, and gender diversity is a general term used to describe gender identities that denote diversity of expression outside the binary framework. In agency theory, it can be assumed that the presence of women in the company's board members can make the company's board more independent and effective in supervising company managers (Thoomaszen & Hidayat, 2020). However, often the presence of women on the company's board is often excluded from important company activities, this can have an impact on company performance, because by limiting the activities that women can participate in, the company loses the potential values of women members.

c. Board Composition

Board composition is the people who comprise a company's board of directors and who are responsible for protecting shareholder interests (Nagarajan, 2021). Board composition is one of most important determinants which can have an impact on firm performance, and characters of board encompass many aspects, for example directors backgrounds such as director's experience, tenure, etc. Board Composition is made up of a variety of elements. Consideration must be given to all to create an effective board, the foundation of a company's governance, such as: board size, board structure, board skill mix, board independence, board diversity, board age and tenure (Lewis, 2022).

d. Leverage

The literal meaning of leverage is the lever used to help carry heavy loads. There are two types of leverage, namely operating leverage and financial leverage. According to Kasmir (2012), the leverage ratio is the ratio used to measure the extent to which the company's assets are financed by debt. This means that the amount of company debt used to finance its business activities when compared to its own capital. According to Sawir (2005), the measurement of leverage ratios commonly used to measure a company's ability to fulfill all its obligations include: debt to asset ratio, debt to equity ratio, times interest earned and long term debt to equity ratio.

e. Firm Performance

In investing, rational investors tend to choose companies that perform well. According to Nizami and Sakir (as cited in Aristiowati, 2021), company performance is an important thing to be achieved by the company, because performance can reflect the company's ability to manage its resources. Firm performance can be seen from various sides, one of which is from finance (Nasfi, et al., 2021). When assessing the company's performance from the financial aspect of the company, it can be done in various ways, among others, by using financial ratios and the Altman model of business bankruptcy. Financial ratios relate two accounting numbers in financial statements by dividing one number by the other (Astawinetu & Handini, 2020). Types of financial ratios are present according to their functions, namely liquidity ratio, activity ratio, solvability ratio, and profitability ratio. Information on firm performance, especially profitability, is needed to assess potential changes in economic resources that may be controlled in the future (Association, 2007).

Gender Diversity and Firm Performance

Gender diversity in top management has a positive impact if implemented, in addition to improving the quality of corporate governance, this gender diversity can also have a positive impact on company performance, and with this gender diversity can minimize agency problems that occur within the company.

H₁: Gender diversity affects firm performance

Board of Director and Firm Performance

The board of directors has the right to represent the company in external and internal affairs, the board of directors has the task of determining the direction of the company's resource policies and strategies, both for the long and short term. So, the greater the number of the board of directors in a company, it is expected to improve better financial performance, and the better the company's performance, the more interested investors are to invest their share capital, because investors have wider opportunities to obtain more information from many sources.

H₂ : Board of Director affects firm performance

Board of Commissioner and Firm Performance

The board of commissioners is in charge of supervising and providing input to the company's board of directors. The board of commissioners does not have direct authority over the company. The main function of the board of commissioners is to oversee the completeness and quality of information reporting on the performance of the board of directors. The number of members of the board of commissioners will allow for an increase in the company's financial performance, because the board of commissioners is tasked with supervising and providing input to the board of directors and its position is very important in bridging the interests of the principal in a company.

H₃ : Board of Commissioner affects firm performance

Board of Independent Commissioner and Firm Performance

An independent commissioner is a member of the board of commissioners who has no financial, management, share ownership and/or family relationship with other members of the board of commissioners, ownership and/or controlling shareholder or other relationships that may affect his or her ability to act independently. According to agency theory, the greater the number of independent commissioners on the board of commissioners, the better they can fulfill their role in supervising and controlling the actions of the executive directors. And with the more functioning independent commissioners in supervising managers, the greater investor confidence will be in the performance that will be obtained by the company.

H₄: The proportion of independent commissioners affects firm performance

Leverage and Firm Performance

One theory that connects debt with profitability is the Trade-Off Theory. The essence of trade-off theory is to balance the benefits and costs that arise as a result of using debt. As long as the benefits are greater, additional debt is still allowed. If the sacrifice due to the use of debt is greater, then additional debt is no longer allowed. *Debt to Equity Ratio* is a debt ratio that shows how much the company's equity is financed by debt. The use of this ratio will cause a burden for the company

which can reduce profits. But if the company is able to use it effectively and efficiently, it will not reduce the company's profit but will increase the company's profit.

H₅: Leverage affects firm performance

Methods

a. Population and Sample

The research population is all property and real estate companies listed on the Stock Exchange in the period 2016-2020 as many as 62 companies. Selection of research samples using purposive sampling method with several criteria that have been determined so that selected as many as 35 samples of companies. The sampling criteria will be presented in Table 1 below:

Table 1. Purposive Sampling Criteria

No.	Criteria	Not Entering Criteria	Entering Creteria
1.	Property and real estate sector companies listed on the Indonesia Stock Exchange for the period 2016-2020		62
2.	Property and real estate companies that did not issue consecutive financial statements during the period 2016-2020	-27	35
Number of sample			35
Number of years of observation			5
Number of unit of analysis (35 x 5)			175

b. Data Collection and Analysis

The research method used is quantitative method. The type of data used in this study is secondary data which is time series data from 2016-2020. The data used are financial statements of property and real estate companies obtained by downloading data from the official website of the Indonesia Stock Exchange (IDX), namely <http://idx.co.id> or from the company's official website.

In this research, the data analysis method was carried out through several stages: Description Analysis, Data Prerequisite Test, Multiple Regression Analysis, Classical Assumption Test, Hypothesis Testing and Coefficient of Determination processed with SPSS version 16.

c. Research Variables and Measures

Research Variables

To get a clear research based on the title of the research conducted by the author in this study, there are six variables, namely:

1. Independent variable (X₁) : Gender Diversity
2. Independent variable (X₂) : Board of Director
3. Independent variable (X₃) : Board of Commissioner
4. Independent variable (X₄) : Board of Independent Commissioner
5. Independent variable (X₅) : Leverage
6. Dependent variable (Y) : Firm Performance

Measures

To avoid misinterpretation of the term variables in this study, a more specific definition is needed, namely:

1. Gender Diversity

Differences in the character of men and women will affect the attitudes and actions taken. The gender variables focus on the board of directors, which is also in line with the proposed gender quota that only considers the female share on the board of directors. Gender diversity is expressed by the following formula:

$$\text{Gender Diversity} = \frac{\text{Number of female director(s)}}{\text{Number of board members}}$$

2. Board of Director

A board of directors is essentially a panel of people who are elected to represent shareholders. Every public company is legally required to install a board of directors; nonprofit organizations and many private companies. Board of director is expressed by the following formula:

$$BOD = \sum \text{Board of Director}$$

3. Board of Commissioner

The board of commissioners is the core of corporate governance, which has the task of ensuring the implementation of corporate strategy, supervising management in managing the company, and requiring accountability. The board of commissioners is a board tasked with supervising and providing advice to company directors. Board of commissioner is expressed by the following formula:

$$COM = \sum \text{Board of Commisioner}$$

4. Board of Independent Commissioner

Independent Commissioner is a member of the Board of Commissioners who has no financial, management, share ownership and/or family relationship with members of the Board of Commissioners, members of the Board of Directors and/or controlling shareholder or with a company that may hinder or hinder his position to act independently in accordance with the principles of GCG principles. Board of independent commissioner is expressed by the following formula:

$$COM INDEP. = \frac{\text{Board of Independent Commissioner}}{\text{Board of Commissioner}}$$

5. Leverage

Leverage is the use of borrowed funds that incur a fixed burden to increase profitability. In this study leverage is seen from the debt to equity ratio, which is a ratio that shows the proportion between liabilities and all equity owned, which is expressed by the following formula:

$$DER = \frac{\text{Liabilities}}{\text{Equity}} \times 100\%$$

6. Firm Performance

Performance in a company is the result of management activities that have been carried out in the company. Usually the parameters used in measuring or assessing the performance of a company is to approach it through financial information taken from the financial statements of the company.

Financial ratios are important things that need to be considered in running a company. Most Wall Street analysts and investors tend to focus on return on equity as their primary measure of company performance. Many executives focus heavily on this metric as well, recognizing that it is the one that seems to get the most attention from the investor community. ROE is expressed by the following formula:

$$ROE = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

Findings and Discussion

a. Findings

Descriptive Analysis

This section presents a summary of the descriptive characteristics of all the variables used in the study. The statistics discussed in this section are the minimum value, maximum value, range, mean and standard deviation. The summary of the results of descriptive statistics from all the data used in this study can be seen in the following table 2:

Tabel 2. Descriptive Analysis

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Gender Diversity	175	.50	.00	.50	.1491	.15620
Board of Director	175	10.00	2.00	12.00	5.0800	1.75656
Board of Commissioner	175	16.00	2.00	18.00	4.6629	2.59211
Board of Independent Commissioner	175	1.40	.20	1.60	.4137	.16697
Leverage	175	13.98	-10.28	3.70	.7705	1.08978
Firm Performance	175	.96	-.55	.41	.0452	.11408
Valid N (listwise)	175					

Table 2 shows the results of descriptive statistics from the balanced panel data for the research sample of 175 with 35 individuals for five years. The maximum value of the firm performance variable is 0,41, the minimum value is -0,96, and the mean value is 0,0452. The mean value of the gender diversity variable is 0,1491, the maximum value is 0,50 and the minimum value is 0,00. The mean board of director is 5,0800, and the maximum value is 12,00, the mean board of commissioner is 4,6629, and the maximum value is 18,00. This two variable have the same minimum value. The maximum value of board of independent commissioner is 1,60, with minimum value is 0,20 and the mean value is 0,4137. The last is leverage with maximum value is 3,70 and the minimum value is -10,28. And the mean value of this variabel is 0,7705.

Normality Test

**Tabel 3. Normality Test Result
 One-Sample Kolmogorov-Smirnov Test**

	Unstandardized Residual
N	175
Asymp. Sig. (2-tailed)	.074

a. Test distribution is Normal.

The normality test used for this study is the Kolmogorov-Smirnov test. Based on table 3 obtained the Asymp. Sig (2-tailed) value obtained is 0.074 above 0.05, so it can be concluded that the data is normally distributed and meet normality test.

Multicollinearity Test

Tabel 4. Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Gender Diversity	.880	1.136
Board of Director	.786	1.272
Board of Commissioner	.815	1.227
Board of Independent Commissioner	.903	1.108
Leverage	.971	1.029

a. Dependent Variable: Firm Performance

The multicollinearity test in this study will be based on the Tolerance Value and VIF value. If the Tolerance Value $> 0,1$ and VIF < 10 , indicates that the moderation model is free of multicollinearity. Tabel 4 show that the Independent Variable has a Tolerance Value of more than (> 0.1) and a VIF of less than (< 10) so it can be concluded that multicollinearity assumptions have been fulfilled or there are no symptoms of multicollinearity.

Heteroscedasticity Test

Tabel 5. Heteroscedasticity Test Result

Model	Sig.
1 (Constant)	.002
Gender Diversity	.973
Board of Director	.312
Board of Commissioner	.074
Board of Independent Commissioner	.719
Leverage	.605

a. Dependent Variable: ABS_RES

For the heteroscedasticity test, the test criteria used are if the significant value is >0.05 , it can be concluded that the data does not occur with heteroscedasticity symptoms. In table 5, each independent variable has a significant level greater than 0.05 (>0.05). So it can be concluded that there are no symptoms of heteroscedasticity or the assumption of the heteroscedasticity test has been fulfilled.

Autocorrelation Test

Tabel 6. Autocorrelation Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.388 ^a	.151	.125	.10677	1.720

a. Predictors: (Constant), Leverage, Board of Commissioner, Board of Independent Commissioner, Gender Diversity, Board of Director

b. Dependent Variable: Firm Performance

The autocorrelation test was performed using the Durbin-Watson. The test criteria using Durbin Watson are as follows:

$D < DL$ or $D > 4-DU$	Autocorrelation Occurs
$DU < D < 4-DU$	No Autocorrelation Occurs
$DU < D < DU$ or $4-DU < D < 4 - DL$	No Conclusion

Based on the autocorrelation test, the Durbin-Watson value was obtained 1.722. Based on the Durbin-Watson table with $K = 5$ and $n = 175$ then we get $du = 1.8117$ and $4 - du = 2.1883$. This shows that Durbin-Watson included in the criteria $du < dw < 4-du$ $1.8117 > 1.720 < 2.1883$, so it can be concluded that there is autocorrelation which means that the model in this study is not free from autocorrelation.

Tabel 7. Autocorrelation Test After Transform Used Lag

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.400 ^a	.160	.129	.10676	1.893

a. Predictors: (Constant), LAG_Y, Gender Diversity, Leverage, Board of Independent Commissioner, Board of Commissioner, Board of Director

b. Dependent Variable: Firm_Performance

Based on the autocorrelation test after transform used Lag, the Durbin-Watson value was obtained 1.893. This shows that Durbin-Watson included in the criteria $du < dw < 4-du$ $1.8117 < 1.893 < 2.1883$, so it can be concluded that there is no autocorrelation which means that the model in this study is free from autocorrelation.

Coeffisien Determination Test

Tabel 8. Coeffisien Determination Test Result

Model	Adjusted R Square
1	.126

a. Predictors: (Constant), Leverage, Board of Commissioner, Board of Independent Commissioner, Gender Diversity, Board of Director

From table 8, it is known that the Adjusted R Square value of 0.126 means that the variables are Gender Diversity, Board of Director, Board of Commissioner, Board of Independent Commissioner and Leverage contributes 12.6% of the influence together on the Firm Performance and the remaining 87.4% is influenced by other variables outside of this study.

F Test

**Tabel 9. F Test Result
 ANOVA^b**

Model	F	Sig.
1 Regression	6.013	.000 ^a
Residual		
Total		

a. Predictors: (Constant), Leverage, Board of Commissioner, Board of Independent Commissioner, Gender Diversity, Board of Director

b. Dependent Variable: Firm Performance

The Testing Criteria for the F Test is if the significance value is less than 0.05, it can be concluded that the independent variables have a simultaneous significant effect (together) on the dependent variables. Based on table 9 above, the significance value obtained is 0.000 (<0.05), so it can be concluded that the variable gender diversity, board of director, board of commissioner, board of independent commissioner and leverage has a significant simultaneous (together) effect on the firm performance variable.

Multiple Regression Test

Tabel 10. Multiple Regression Test Result

Model	t	Sig.
1 (Constant)	-.384	.702
Gender Diversity	.947	.345
Board of Director	2.817	.005
Board of Commissioner	1.718	.088
Board of Independent Commissioner	-1.436	.153
Leverage	-3.793	.000

a. Dependent Variable: Firm Performance

To test multiple linear regression using a hypothesis test (T test) in which the test criteria is if the significance value is less than 0.05, it can be concluded that the independent variable has a significant effect on the dependent variable. Based on table 10, the gender diversity variable has a significance value of 0.345 (> 0.05), so it can be concluded that the gender diversity variable has no significant effect on the firm performance. The board of director variable has a significance value of 0.005 (< 0.05), so it can be concluded that the board of director variable has a significant influence on firm performance. The board of commissioners variable has a significance value of 0.088 (> 0.05), so it can be concluded that the board of commissioners variable has no significant effect on the firm performance. The board of independent commissioner variables has a significance value of 0.153 (> 0.05), so it can be concluded that the Board of independent commissioner variable has no significant Influence on firm performance. And the last is leverage variables has a significance value of 0.000 (< 0.05), so it can be concluded that the leverage variable has significant Influence on firm performance.

b. Discussion

The results of the research, which states that gender diversity does not affect firm performance, support the research that has been done previously by Yasser (2012), and Alshirah, et al. (2022). However, this study does not supported the results that has been done previously by Sutrisno & Mohamad (2019), Habash & Abuzarour (2022). This finding explains that the phenomenon of gender diversity is not appropriate in Indonesia. Many companies in Indonesia, especially the private sector, have directors classified as a family or that private companies in Indonesia are family companies. So the appointment of a leader or position tends to be a family decision and not because of the achievements of internal parties or seniors in the company (Wicaksono, 2019).

The board of commissioner size does not contribute to firm performance. The results of this study are in accordance with previous research conducted by Rahardja (2014), and Hartati (2020). However, these results contradict the results of research conducted by Irma, Yeni, Noorina, & Muktiyanto (2015), Muharam & Atyanta (2021). It is expected that board of commissioner who stay for a long time in a company could build a good relationship with director; therefore, it will impact decision-making in terms of enhancing the firm performance (Robin & Amran, 2016). Independent commissioners have no effect on firm performance. The results of this study are not in accordance with previous research conducted by Putra (2015), Setyaningsih & Aufa (2022)

which stated that the board of commissioners had a positive effect on company performance. However, this research is in line with the research conducted by Lumban Raja (2016), and Irma (2019) which states that independent commissioners do not affect the firm performance. This means that the size of the proportion of the independent board of commissioners does not guarantee whether or not the functions of supervision, management, and accurate decision making in a company are good.

The board of directors has a positive and significant effect on corporate performance. The board of directors is a trusted agent that have responsibility to manage the company's assets and human resources. In addition, the board of directors has the right to represent the company in various activities. The number of board of directors will influence the speed and power of the firm decision making. The study by Pratiwi & Chariri (2021), Al-Saidi (2021) show that there is a positive and significant association between the number of boards of directors and firm performance. The study by Intia & Azizah (2021), Kusumawardhany & Shanti (2021) find that the board of directors do not affect firm performance.

Leverage has a significant negative effect on firm performance. The greater the leverage, the lower the company's performance as measured by the profitability ratio. This is in accordance with the opinion of Setyoningsih (2012), Noomuliyansih & Swandari (2016) which states that if the company's leverage is high, the company has a higher interest expense. The interest paid will reduce the company's profit, if the interest paid is higher and the income is fixed, the company's profit will be lower. However, the findings of this study contradict the results of research by Wahyuni (2022) which states that debt to equity ratio has a significant positive effect on profitability. Wahyuni concluded that every increase in leverage there will be an increase in profit for the owner of the company. If a company has a negative debt to equity ratio, this means that the company has negative shareholder equity. In other words, it means that the company has more liabilities than assets. In most cases, this is considered a very risky sign, indicating that the company may be at risk of bankruptcy.

Conclusion

The study suggest that the number of board of directors needs to be added if the firm performance has not optimal, and in using debt, the company must be careful, because the amount of debt has a negative effect on firm performance. If a company has a negative debt to equity ratio, this means that the company has negative shareholder equity. In other words, it means that the company has more liabilities than assets. In most cases, this is considered a very risky sign, indicating that the company may be at risk of bankruptcy.

While this research offers several insights into factors that affecting firm performance, some limitations should be pointed out. First, the author study property and real estate sector listed in IDX; it would also be interesting to study and compare other sectors settings, such as manufacturing sector or maybe Indonesia non-listed companies. Second, future research could also take into account other variables which affecting firm performance in property and real estate companies outside of the variables that have been studied by the author.

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An Empirical Study on Brand Experience, Satisfaction, and Brand Trust towards Brand Loyalty

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Abstract : This study aims to investigate the effects of brand experience, satisfaction, and brand trust on brand loyalty of smartphone brands in Indonesia. The study was conducted using an online survey. Partial least squares structural equation modeling was used as the analysis method for testing the hypotheses. The data analysis results indicated that brand experience significantly influenced satisfaction and brand trust. However, the finding showed that satisfaction did not significantly affect brand loyalty. Finally, the results showed that brand trust significantly influenced brand loyalty. Marketing managers can benefit from the findings of this study by understanding the dynamics of how brand experience, satisfaction, and brand trust build brand loyalty.

Keywords : Brand Experience, Satisfaction, Trust, Loyalty

INTRODUCTION

Over the last decade, brand loyalty research has become a major topic in marketing and consumer research. With the proliferation of the competing brands in the market, keeping consumers loyal is an imperative for marketing managers. Achieving customer loyalty is a central goal for most firms due to its contribution to their profitability and long-term survival. Loyal customers engage more in positive word-of-mouth communication, are less price sensitive and resist competitive offers. Many studies had been focused on satisfaction, and brand trust factor as a determinate factor of loyalty.

Although brand trust and satisfaction are very important constructs for brand experience and loyalty in the relational context. Brand experiences result from stimulations and lead to pleasurable outcomes, and consumers want to repeat these experiences. That is, brand experience should affect not only past-directed satisfaction judgments but also future directed consumer loyalty. Consumers should be more likely to buy a brand again and recommend it to others and less likely to buy an alternate brand. The main aim of the present study was to test a general framework for building a consumer- brand relationship from an experiential view. Therefore, the objective of this study is to investigate the effects of brand experience, satisfaction, and brand trust on brand loyalty. To achieve the objective, this study uses smartphone users in Indonesia as the research context. In Indonesia, smartphones have overwhelmed the market. According to Central Agency on Statistics, the total number of smartphone users in Indonesia are 341,28 million users in year 2019 and 355,62 million users in year 2020. The market growth is 6,84% in year 2019 and 4,20% in year 2020. Given that smartphones have potential growth in Indonesia and brands are a crucial factor in smartphone marketing, the research context is appropriate. The results of this study may provide strategic suggestions for smartphone marketing.

LITERATURE REVIEW

Brand Experience and Satisfaction

Brand experience is defined as the “subjective internal consumer responses (sensations, feelings, and cognitions) and behavioural responses evoked by brand-related stimuli that are part of a brand’s design, and identity, packaging, communications, and environments” (Schmitt et al., 2009). As such, the multidimensional construct of brand experience consists of four dimensions (sensory, affective, intellectual and behavioural). Satisfaction is a complex concept, and the consumer's background, characteristics, expectations as well as other stimuli such as convenience, sales people, selection, atmosphere, locations and promotional activities all affect it (Anselmsson, 2006), (Devesa et al., 2010). It is also the psychological and emotional result of individual experiences, regardless of whether it matches initial expectations (Baker & Crompton, 2000) and will influence the success of a firm (Nam et al., 2011). In sum, satisfaction refers to the emotional reactions, which emphasizes the emotional construct (Iglesias et al., 2011) and brand relationship quality which refers to the brand satisfaction of consumers in a long-lasting relationship.

(Schmitt et al., 2009) and (Iglesias et al., 2011) in their empirical work find significant effects of brand experience on brand personality, brand satisfaction and brand loyalty. Using brand experience to build a good image in the minds of consumers is an important way for enterprises to win their customer's loyalty and gain a competitive advantage in the implementation of strategic policies (Yao et al., 2013). Hence, the following hypothesis is formulated:

H1. Brand Experience has a positive influence on Satisfaction

Brand Experience and Brand Trust

(Keng et al., 2013) explained that a greater Brand Experience is not only associated with familiarity, but also critically influences understanding, the process of enjoying, enhancing, and developing a brand. In the process of consuming a brand, a consumer feels a pleasant experience, then this can help build consumer confidence to continue using the brand in the future. This explanation is in line with the statement that brand trust is the willingness of customers to trust the brand with all the risks where the hope of the brand can provide positive benefits for customers (Ahmed et al., 2014). Previous research has stated that Brand Experience is proven to have a significant effect on Brand Trust (Chinomona, 2013), (Yohanes Surya, 2014). Therefore, the second hypothesis of this study is:

H2. Brand Experience has a positive influence on Brand Trust

Brand Experience and Brand Loyalty

Brand experience is consumers' felt with a brand. Brand experience refers to consumers' purchase and consumption experiences with the brand and the organization, as well as to the brand influence on non-consumers (Khan & Rahman, 2015). A positive brand experience can be influenced by the overall product, shopping and consumption experience encountered by the consumers, thus resulting in brand satisfaction and loyalty (Schmitt et al., 2009). Customers' brand experience gains through consumption will possibly be stronger and last longer (Zarantonello & Schmitt, 2010). Customers today not only seek the tangible benefits provided by the brand organization but also the experience associated with the brand (Ong Chuan Huat et al., 2018). Brand loyalty represents a customer’s positive attitude towards a brand or offering, in addition to repeat buying behaviour (Liu et al., 2012), (Rather et al., 2018). Based on this viewpoint, brand loyalty signifies the consequence of relationship between customer attitude in buying behaviour

and brand. Loyal customers have a strong commitment to a brand, because they believe that brand is more satisfactory than the alternatives (Holland & Baker, 2001). Brand Loyalty is crucial for brand managers, because it provides continuous profit, decreased operating and marketing costs, increased customer revenue and price premiums, more referred new customers and competitive advantage (Tepeci, 1999).

Brand experience conceptualization and scale development are very important for understanding and managing brand trust and loyalty concepts (Schmitt et al., 2009). In addition, brand experience can positively affect consumer satisfaction and brand loyalty, as well as brand trust (Zarantonello & Schmitt, 2010), (Ha & Perks, 2005). Therefore, the third hypothesis of this study is:

H3. Brand Experience has a positive influence on Brand Loyalty

Satisfaction and Brand Loyalty

Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance in relation to his or her expectations. For achieving profitability and loyalty, satisfaction is the major factor for any company (Ihtiyar et al., 2013). The term customer satisfaction and its importance were defined by (Zeithaml et al., 1996) as, to achieve continuous success of companies in the long run, the need to emphasize customer satisfaction is a key consideration. In other words, satisfaction can only be met when the performance generated by companies exceeds customer expectations. (Lau et al., 2013) specifically explained that meeting the expectations of the customers will not only provide customer satisfaction but also develop customer loyalty that will then lessen the cases of customer loss rates or improve the retention rate.

Evidence showed that there is a significant relationship between customer satisfaction and customer loyalty (Leninkumar, 2017). Customer loyalty is considered a result of customer satisfaction, when customers who have good experiences with the service of the company will continue to deal with the company viewing it as less risky, thereby making them loyal and rational in decision-making. Results of different research show that highly satisfied consumers continually buy the products of the firm that provides satisfaction. In another words, when a consumer is satisfied, he/she develops a high level of commitment and loyalty to the brand/firm. Hence, satisfaction has a direct effect on loyalty. Therefore, the fourth hypothesis of this study is:

H4. Satisfaction has a positive influence on Brand Loyalty

Brand Trust and Brand Loyalty

Researchers agree that brand trust is a key component in the customer-brand relationship. This means that trust antecedes customers' relationship commitment (Morgan & Hunt, 1994). Therefore, in maintaining a positive relationship between consumers and providers, scholars consider trust as a crucial component (Elliott & Yannopoulou, 2007). Brand trust is achieved through mutual experiences and activities and is a necessary concept for a successful relationship between a company and its customers (Anderson & Narus, 1990). (Choi, 2012) defined trust as a belief where the consumer's chosen store will bring the best benefit to them.

Previous research states that there is a positive influence between brand trust and brand loyalty (Sahin et al., 2011), (Song & Wang, 2019). In the research of (Kocak Alan & Kabadayi, 2012), (Ahmed et al., 2014) and (Putra & Sulistyawati, 2014) state that brand trust has a positive and significant effect on brand loyalty. Brand loyalty is defined as consumers' favourable attitude

toward a brand that results in intentions to repurchase and recommend (Anderson & Karunamoorthy, 2003). When customer loyalty to a brand increases, the vulnerability of that customer group to threats and brand attacks of competitors' products can be reduced. Therefore the fifth hypothesis of this study is:

H5. Brand Trust has a positive influence on Brand Loyalty

Research Method and Measures

To examine the hypothesized research model, primary data collection was carried out through structured questionnaire. As the objective of this research was to investigate the brand loyalty of existing smartphone consumers, the target respondents involved in this research was respondents who have purchased smartphone and used it for him/herself. The number of respondents was 258 and taken using purposive sampling method. The respondents were assured the confidentiality of the information provided during the survey. The variables in this research, i.e. brand experience, satisfaction, brand trust, and brand loyalty were measured with questionnaire by using Likert scale that ranged from 1 = strongly disagree to 5 = strongly agree. The hypothesis were tested using Partial Least Square Structural Equation Model (PLS SEM). The total of return questionnaire was 258. After examining the damaged questionnaire and outlier data, it was finally remained 217 data (84%) which is suitable for analysis.

FINDINGS

Demographics characteristics of respondents

Some demographic variables were collected in this study: age, gender, level of education, occupation and average income per month, and these results are summarized in Table I. In terms of age, 75.58 percent of the respondents were between 17-25 years; 14.29 percent were between 26-35 years; 5.99 percent were between 36-45 years, 2.30 percent were between 46-55 years while 1.84 percent were 56 years and above. In terms of gender, 58.99 percent of the respondents were females and 41.01 percent were males. In terms of education, about 52.07 percent of them were senior high levels of education, 4.15 percent had Diploma III level education; 32.72 percent had Diploma IV or Bachelor level education; 10.14 percent had Masteral degree and 0.92 percent had Doctoral degree level of education. In terms of occupation, about 48.85 percent of the respondents were student, 3.23 percent were civil servant, 37.79 percent were employee, 7.83 percent were entrepreneur, and 2.30 percent were house wife. In terms of monthly income, about 23.04 percent were non-income earners, 23.04 percent earned a monthly income less than Rp2.515.000, about 33.18 percent earned a monthly income between Rp2.515.000 - Rp5.000.000, 7.83 percent earned a monthly income between Rp5.000.001 - Rp7.500.000, 5.07 percent earned a monthly income between Rp7.500.001 - Rp10.000.000, and 7.83 percent earned a monthly income above Rp10.000.000 (see Table I).

Table I. Demographics of Respondents

Demographic Profile	Category	Frequency	Ratio (% of the total)
Age	17-25	164	75.58
	26-35	31	14.29
	36-45	13	5.99
	46-55	5	2.30
	56 and older	4	1.84
Gender	Male	89	41.01
	Female	128	58.99
Level of Education	Junior High School	0	0
	Senior High School	113	52.07
	Diploma III	9	4.15
	Diploma IV / Bachelor	71	32.72
	Masteral Degree	22	10.14
	Doctoral Degree	2	0.92
Occupation	Student	106	48.85
	Civil Servant	7	3.23
	Employee	82	37.79
	Entrepreneur	17	7.83
	House Wife	5	2.30
Income distribution	Non-income earners	50	23.04
	Less than Rp2.515.000	50	23.04
	Rp2.515.000 - Rp5.000.000	72	33.18
	Rp5.000.001 - Rp7.500.000	17	7.83
	Rp7.500.001 - Rp10.000.000	11	5.07
	Above Rp10.000.000	17	7.83

Notes : n = 218, 1 US\$ = Rp 14.320 (currency exchanger March 10, 2022)

Measurement model

Confirmatory analyses of the data related to each variable were performed using the partial least square structural equation model (PLS–SEM) to determine the reliability and validity of the data. More specifically, the writer opted to apply the Partial Least Squares (PLS) SME approach, using SmartPLS v3.2.9 software (Ringle et al., 2015). Construct reliability measures the extent of internal consistency of measures used, and it is assessed through the item factor loadings with acceptable value of 0.70. From Table II, all of the constructs have item loadings higher than the recommended 0.70.

Table II and Figure 1 indicate acceptable values for both the Cronbach's α and the composite reliability. All the variables have Cronbach's α value higher than the acceptable 0.6 (Hair et al., 2014). Similarly, the requirements for the composite reliability of 0.70 of all the variables have been established. The table also reveals that the value of the average variance extracted from each variable is greater than the acceptable threshold 0.50 for convergent validity (Hair et al., 2014). The estimated model gave an acceptable fit to the data (SRMR = 0.069; NFI = 0.805), indicating that the hypothesized model fits the empirical data well. Accordingly, to ensure that each variable represents distinct phenomenon, (Fornell & Larcker, 1981) criterion is used to evaluate the discriminant validity of the variables under study. As shown in Table III, the value of each pair of

the construct is greater than the value of the square correlations between the pairs of constructs; consequently, the discriminant validity and convergent validity were established.

Table II. Item Loading, Construct Reliability and Discriminant Validity

Measurement Items	FL	CA	CR	AVE
BE1	0.777	0.637	0.805	0.579
BE2	0.764			
BE3	0.741			
SAT1	0.874	0.884	0.920	0.742
SAT2	0.819			
SAT3	0.863			
SAT4	0.889			
BT1	0.864	0.866	0.909	0.713
BT2	0.830			
BT3	0.853			
BT4	0.831			
BL1	0.882	0.899	0.930	0.768
BL2	0.873			
BL3	0.861			
BL4	0.889			

Notes: BE, Brand Experience; SAT, Satisfaction; BT, Brand Trust; BL, Brand Loyalty; FL, Item Loadings; CA, Cronbach's α ; CR, Composite Reliability; AVE, Average Variance Extracted

Figure 1. PLS Algorithm

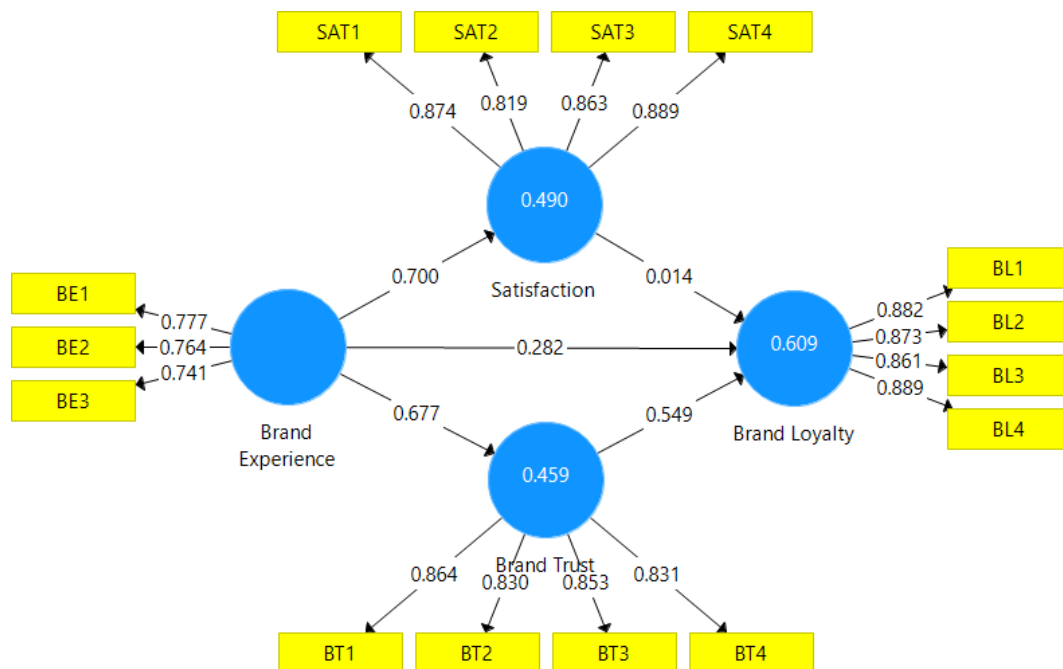


Table III. Discriminant Validity

Variables	BE	BL	BT	SAT
BE	0.761			
BL	0.663	0.876		
BT	0.677	0.752	0.845	
SAT	0.700	0.672	0.838	0.861

Structural model

Latent variable techniques of PLS–SEM were employed to evaluate the hypotheses developed in this study. To assess the significant relationship hypothesized in the study, the direct relationship of the independent variables with the dependent variable were examined. The direct structural relationships were reported in Table IV and Figure 2.

The result indicates that brand experience positively and considerably relates to satisfaction ($\beta = 0.038$; $t = 18.578$; $p = 0.000$), thus H1 is supported. Similarly, brand experience positively relates to brand trust ($\beta = 0.044$; $t = 15.444$; $p = 0.000$), therefore H2 is also supported. Likewise, brand experience positively relates to brand loyalty ($\beta = 0.082$; $t = 3.446$; $p = 0.000$), therefore H3 is supported. However, H4 is not supported, as the result indicates not significant relationship of satisfaction with brand loyalty ($\beta = 0.108$; $t = 0.129$; $p = 0.898$). Finally H5 is supported as the statistical result shows a significant positive relationship between brand trust with brand loyalty. The R^2 score (0.609) indicates that overall, the independent variables, Brand Experience, Satisfaction, and Brand Loyalty predicted the Brand Loyalty by 61 percent (figure 1)

Figure 2. PLS Bootstrapping

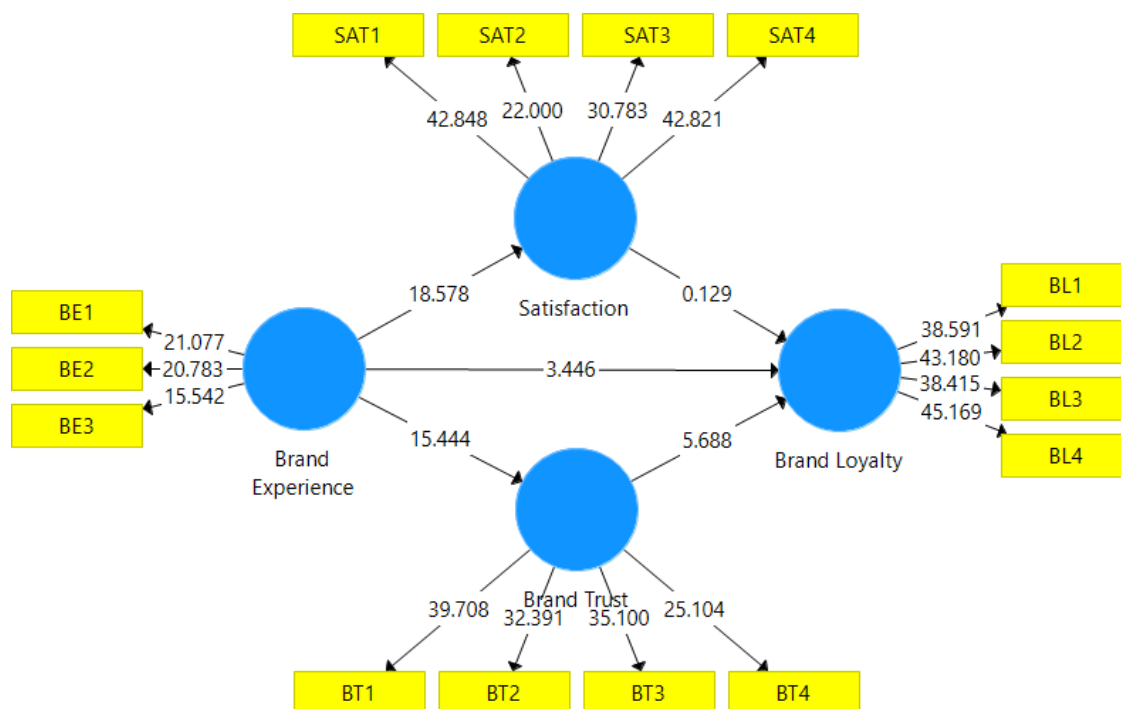


Table IV. Hypothesis Testing Results

Hypothesis	Original Sample	Sample Mean	STDEV	t-statistics	p-values	Result
H1. BE → SAT	0.700	0.703	0.038	18.578	0.000	Significant
H2. BE → BT	0.677	0.681	0.044	15.444	0.000	Significant
H3. BE → BL	0.282	0.281	0.082	3.446	0.001	Significant
H4. SAT → BL	0.014	0.014	0.108	0.129	0.898	Not Significant
H5. BT → BL	0.549	0.550	0.097	5.688	0.000	Significant

Note: *Significant at $p < 0.05$

DISCUSSION

First, this study found that brand experience has a significant positive and direct influence on satisfaction. This result confirms previous studies findings (Schmitt et al., 2009); (Iglesias et al., 2011) that brand experience has significant effects on brand personality, brand satisfaction, and brand loyalty.

Second, this study found that brand experience has a significant and direct influence on brand trust. The result confirms previous research stated that Brand Experience is proven to have a significant effect on Brand Trust (Chinomona, 2013); (Yohanes Surya, 2014).

Third, this study found that brand experience has a significant positive and direct influence on brand loyalty. This study is consistent with the findings of (Zarantonello & Schmitt, 2010), (Ha & Perks, 2005) that brand experience can positively affect consumer satisfaction and brand loyalty, as well as brand trust.

Fourth, this study found that satisfaction has no significant relationship with brand loyalty. This study is contrary with the previous research stated that there is a significant relationship between customer satisfaction and customer loyalty (Leninkumar, 2017). The possible reason of this negative relationship may be the respondents' profile who participated in this research. Majority of respondents' age are between 17 – 25 years and their monthly income are less than Rp2.515.000. Even though they are satisfied with the products they purchased but it does not guarantee that they will loyal to the brand. Hence, price of the product that will influence them to be loyal to the product or not.

Fifth, this study found that brand trust has a significant positive and direct influence on brand loyalty. This result confirms previous research stated that there is a positive influence between brand trust and brand loyalty (Sahin et al., 2011); (Song & Wang, 2019); (Kocak Alan & Kabadayi, 2012); (Ahmed et al., 2014) and (Putra & Sulistyawati, 2014).

CONCLUSION

This study uses data from a survey of 217 consumers who have purchased smartphone. This research aimed to investigate the effects of brand experience, satisfaction, and brand trust on brand loyalty of smartphone brands in Indonesia. This study develops of five hypotheses. The result shows a positive relationship between brand experience with satisfaction, brand experience with brand trust, brand experience with brand loyalty, and brand trust with brand loyalty. However, the study found that satisfaction shows a negative relationship with brand loyalty. The possible reason of this negative relationship may be the respondents' profile who participated in this research are between 17 – 25 years old and their monthly income are less than Rp2.515.000.

This study provides empirical knowledge for marketing managers in enhancing their marketing strategies. The manager should consider the target market whether the markets consist of consumers who are loyal to the brand or loyal to the price. Consumers who are loyal to the brand will prefer reputable product while consumers who are loyal to the price will prefer affordable product. The recommendation for a future research should focus on primary data collection and unit analysis. The sample of the study should be more evenly distributed in each age category so it can generate population. The unit analysis can be replaced by other shopping goods.

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The Use of Instagram, Youtube, and TikTok in Mastering Business English Vocabulary

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Abstract: The fast development of technology plays a role in learning of English, especially with the growth of social media and its access-easiness. Students of non-business major might be able to improve their English vocabulary in business through social media as an alternative way of learning. This research aims to reveal the effectiveness of Instagram, YouTube, and TikTok as medias for mastering English vocabulary in business and to find out the best social media to learn business English vocabulary for non-business major students. This research applies the quantitative method in which the vocabulary test is used. The questions are closed-ended based on the application of three social media in the mastery of business English vocabulary. The findings are in form of percentages representing the applications. The values are to give new passion, innovation, and information in mastering English vocabulary in business.

Keywords: TikTok, Instagram, YouTube, Business English Vocabulary, and Mastery

Introduction

Currently, English is an international language that must be mastered in line with rapid global developments. To keep up with rapid global development and good international relations, non-native speakers must learn and master English. The goal is to pursue global developments and have good international relations with existing countries. In other hand, communication and to have international relations in a business is essential. Nowadays, online business is developing significantly because many people try to earn money. It increases a higher change where people from other countries get interested to see and buy the product. However, since the product is seen by many people from all around the world, language may become a problem. Thus, the best way to communicate with the customer is by using the international language, yet one of the international languages is English.

English is undoubtedly, the best known of international language. One person out from five people in the world is said to understand English (Nishanti, 2018: 817). In mastering English, the most basic and important thing is to learn and master the English vocabulary. Moreover, in the mean of business, English Business vocabulary would become the essential matter. According to Richards and Renandya (2002: 255), vocabulary is a core component of language proficiency and provides much of the basis for how learners speak, listen, read, and write. Mastering business English vocabulary is not an easy job, it requires a big effort from the inside. Several ways like going to the course or attending the formal lessons might be some options. Besides, the right facilities and infrastructure are also some other factors that need to consider. However, not all facilities and infrastructure provided for learning English can be accessed easily. For example, a

paid course at a fantastic price, the price of books and English dictionaries that make people think twice, and so on. In addition, the covid-19 pandemic attacks and disrupts many human activities due to interaction restrictions. In short, it has become difficult for people to learn English normally.

Along with the development of today's technology, the above obstacles can be overcome through social media. Social media is not just a means to communicate, it has become a source of information, education, entertainment and so on which is loved and enjoyed by people from all ages. Mastery of English can be learned through social media which has a lot of English vocabulary. Aladjem & Jou (2016: 161) stated that language learning can be supported and learned through some social medias (facebook, Instagram, and others). Furthermore, Napitupulu & Refri (2013:10) added that students who actively access social media tend to have more capability in accidental language learning. Moreover, according to Gavin et al (2007:7), young learners are near to technology, and it is a part of their lives. Therefore, it shows students can master English vocabulary through social media. In conclusion, social media is one of the basic needs for young generations to fulfil their knowledge, and skills, including in mastering English vocabulary.

Social media itself has various kinds that can be accessed by all groups, however not all countries have the same application to be accessed. For example, in China, Facebook, WhatsApp, and YouTube cannot be accessed by the public because they are prohibited by the Chinese government. Fortunately, it does not happen in Indonesia, there are no special restrictions on accessing social media. In Indonesia, there are several social medias that are widely used by the public, including Instagram, Youtube, and TikTok. A study from *DataReportal* on Suara.com in February 2022 that the use of social medias has reached 191.4 million users in January 2022. It is equivalent to 68.9% of total population of Indonesia. An article which was written by Jemadu & Prastya (2022) on Suara.com mentioned Instagram has reached 99.15 million people or equivalent to 35.7% of the total population of Indonesian people. Youtube has reached 139 million people which is equivalent to 50% of the total population. Meanwhile, Tiktok has reached 92.7 million people. The enormous number of users from the three applications has triggered to know more the function of the applications especially as a medium for learning English vocabulary. Consequently, the writers want to conduct further research on The Use of Instagram, YouTube, and Tiktok in Mastering Business English Vocabulary.

Literature Review

Vocabulary

Vocabulary is the part of a particular language, one of the basic things that should be mastered. It takes a significant part in mastering languages fluently. According to P Nation, and P Meara (2010: 41), vocabulary is important, but to use vocabulary well it needs to be available for fluent use. Developing fluency involves learning to make the best use of what is already known. Other studies have shown that vocabulary is one of the core components of language proficiency and determines how well a learner speaks, listens, reads, and writes (Renandya & Richards, 2002: 225). Good vocabulary mastery helps people in conveying and receiving ideas from each other.

Business

A business is simply defined as any kind of activity of making a profit that provides goods and services to the consumers (Collins, 2012: 16). It has been numerous interesting products that raise

the interest to open a new-owned business. Indirectly, it has raised up some new entrepreneurs. It may happen because to open a new business, it is not as hard as it used to be, including the capital as well.

Talking about business would take us to return an old activity in which a business was born. Business first gets found nearly 20,000 years ago. According to Kahu (2022, 5), a business is a starting process of being an entrepreneurship. At first, it was known as trading between humans, and it happened in New Guinea around 17,000 BCE, where people would like to exchange obsidian for other needed goods – like tools, skins, and food.

Social Media

Social media is the platform for people nowadays to get some information, communicate, do business, and so forth. People access social media through smartphones, computers, and gadgets that support the access to social media. Social media has a variety of kinds such as Facebook, Instagram, Twitter, and so forth.

According to Boyd and Ellison (2007: 211), social media is *“web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system.”*

This statement clarifies social media nowadays, people have profiles or accounts with their social media and it's been used to communicate, share information, do business, and so forth. According to Chou (2014: 28), social media has some characteristics such as interactivity, platform quality, knowledge sharing mechanism. This includes students as well. Through social media, students can do a lot of things.

As explained above, social media has a variety of types and different functions in each type. Today, it is no wonder that every person would have at least has one account of any social media. Among those variety kinds of social media, there are three social medias that are quite popular in Indonesia. The writers have chosen according to their functions especially in having some parts that may help the students in learning. Since the purpose of the research is about to find the effectiveness in learning business English vocabulary. Therefore, the writers choose three famous social media namely Instagram, Youtube, and TikTok in the research.

Methods

The form of this research is descriptive methods to analyse and answer the questions of research. According to Loeb et al, (2017: 2) The goal of descriptive research is to identify, describe trends, variation in populations, create new measures of key phenomena or simply describe samples in studies aimed at identifying causal effects. The descriptive method implemented in this research is to find out the answer of how effective social media as the tool of learning business English vocabulary towards the non-business learners. In other words, descriptive method is relevant to this research that carry the latest trends such as Instagram, YouTube, and TikTok. These social media applications have been widely used by people today. And the applications are also used to identify the causal effects towards the non-business learners that learn autodidactic by using the top three applications. Therefore, descriptive method is a suitable method to answering the questions of this research.

Sampling

Sample is the small group that got chosen out of a large category. A small group of people that is observed by authors is included as sample. The writers use all of the bench of English Study Program as the sample to collect data by using questionnaire and test. The number of samples are around 100 people. However, during the research only 73% of sample population response or fill the test.

Data Collection

The writers used questionnaire and test form as the tools of data collections. The test consists of 6 questionnaires and 15 questions for the test. All questionnaires and tests are made and tested through the Google Form. The samples are requested to fill the questionnaire and do the test.

Measurement

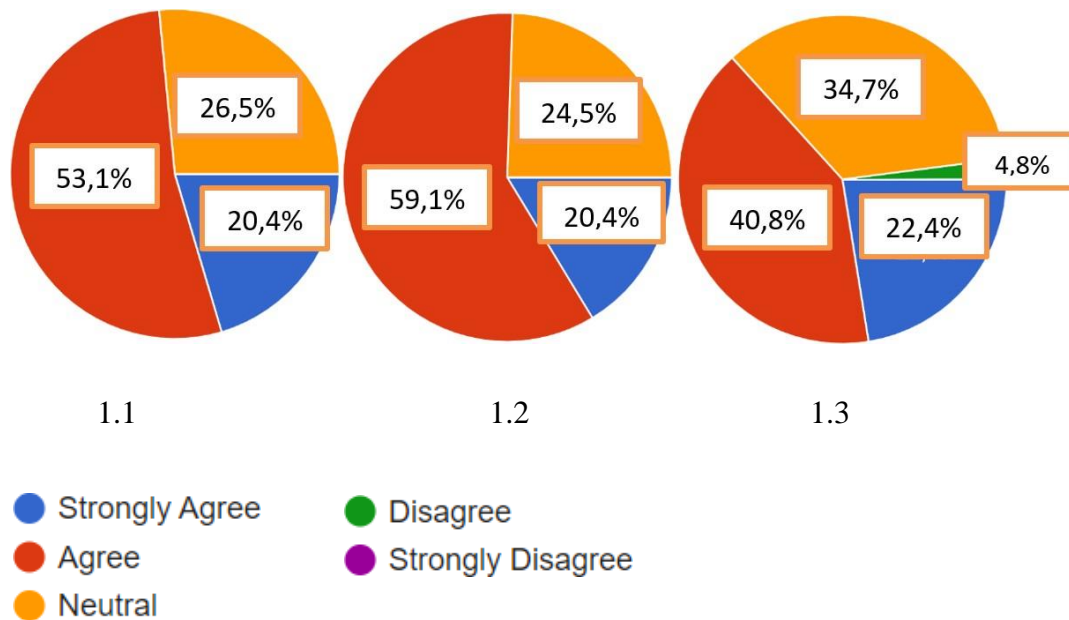
After the data collected, the writers will analyse and identify the answer of the questioners and test form. For the answer of questioner section, the writers will use scale that will be calculated with percentage index formula. For the test section, the writers will give the test in the form of matching the picture and multiple choices to the sample. For the correct answer the score will value 1 while the wrong answer the score will value for 0. Then all the answers of participant will be accumulated in percentage.

Findings

The Questionnaire

To analyse the questionnaire, the writers collected data from the samples by using questionnaire through on Monday, May 30th, 2022. The questionnaire consists of 6 number. Each sample has to choose whether strongly agree, agree, neutral, disagree, or strongly agree for each number. The percentage score can be found in the pie charts with explanation below.

1. The samples opinion about the use of social media

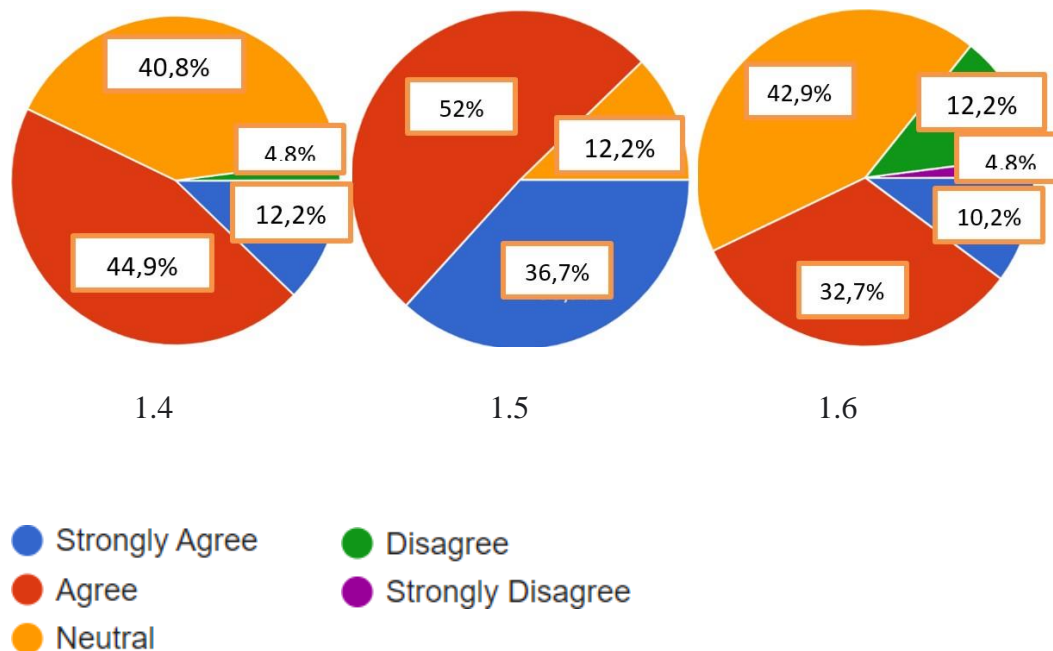


1. Instagram, YouTube, and TikTok can be a mean of mastering management vocabulary
2. Instagram, YouTube, and TikTok make it easy to helping management vocabulary
3. Your ability of English vocabulary increases after viewing management content on Instagram, YouTube, and TikTok.

The three pie charts above represent samples' opinion that social media might be the tools to enrich business English vocabulary. This can be seen at the first pie chart (1.1) shows 53,1% people "agree", 20,4% "strongly agree", and 26,5% "neutral". More than 50% samples agree that Instagram, Youtube, and TikTok can be the tools for mastering business English vocabulary.

Social medias are not just used for sharing ideas or communicating with relatives, but it also helps samples for studying. It is showed by second chart (1.2) that 59,1% "agree" and 20,4% "strongly agree". Social media can easily help them to improve their business English vocabulary. Other than that, from the chart the writers concluded that social media helps increasing samples' business English vocabulary after watching the English content. It is shown at the third chart (1.3) that 22,4% samples state "strongly agree" and 40,8% samples state "agree".

2. The application that second semester students prefer.



1. Instagram helps you to improve your Business English vocabulary.
2. YouTube helps you to improve your Business English vocabulary.
3. TikTok helps you to improve your Business English vocabulary.

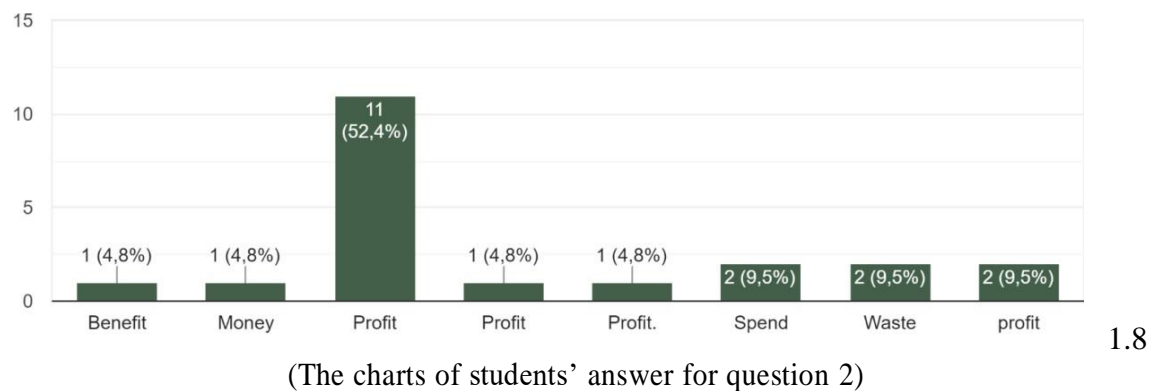
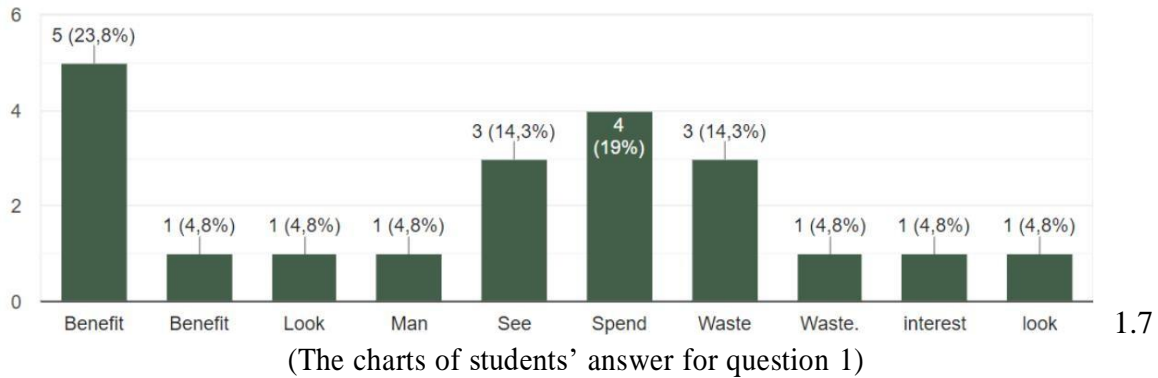
From the charts above, it is clear that YouTube is the most preferred social media that get choose as a platform to increase their Business English vocabulary. From the chart (1.5), 52. % who state “agree” and 36.7% samples state “strongly agree”. The reason is because at YouTube people can find any video to increase their Business English vocabulary in a longer time limit (12 hours).

Meanwhile, from the chart (1.6) TikTok also has a high percentage of 32,7% samples “agree” and 10,2% of sample “strongly agree”. In the other hand, 40,8% of population chose “neutral” for Instagram. But there are 12,2% “strongly agree” and 44,9% “agree” that Instagram is used to improve their Business English vocabulary. The videos of Instagram and TikTok have time limit and the material that shared are separated into several short videos due to the time limit. Therefore, the samples prefer YouTube. However, the samples agree that both Instagram and TikTok also assist them in enriching the English vocabulary.

The Tests

1) Matching the picture

In this section, the writers take two samples of questions that represent students' understanding of matching pictures. First chart is the representative answer for question number one and the second chart is representative answer for question number two.



The first chart (1.7) shows variative answers from the sample which they are creative in answering this section question. However, not all of the sample understand and following the rules that given by the writers that cause variative answers on chart. According to the chart (1.7) there are 19% of sample population answer the question correctly by choosing 'spend' as the correct answer. While other sample answer incorrectly. It is proven on the chart (1.7) there is 28% (23,8% + 4,8%) of population answer 'benefit' which is wrong answer. Another answer is 'waste' that is chosen by 19% of population. 'See' is chosen as the answer by 14,3% of population. 'Look' is chosen as the answer by 9,6% of population. The rest such as 'man' and 'interest' is chosen by 4,8% of population.

The second chart (1.8) shows significant difference with the first chart. On the second chart 71,5% of population answer the second question correctly by choosing 'profit' which is the correct answer. Each type such as "spend" and "waste" are chosen 9,5% of population. While the rest for "money" and "benefit" are chosen 4,8% of population.

For the rest of questions 3 to 5 the writers do not find any significant differences. Therefore, the writers did not put any charts for questions number 3 to 5. As the replacement the writers will explain it in paragraphs.

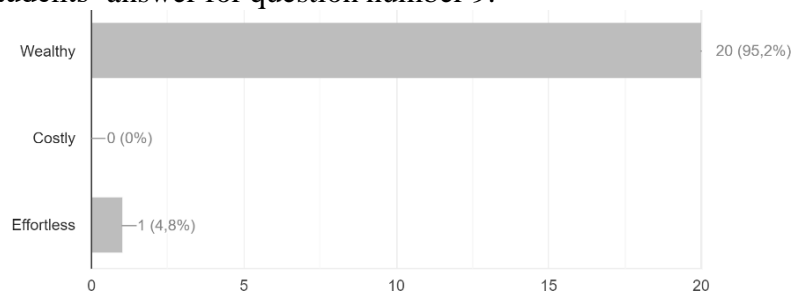
For question number 3, 52,4% (47,6% + 4,8%) of population choosing “Look” which is the correct answer. While the rest choosing the wrong answer such as “See”, detectives, and “Interest”.

Other responds for question number 4, around 30% of population choosing the right answer “Benefit” and the rest choosing the wrong answer.

For response number 5, around 38% of population choosing “Waste” as the right answer and the rest responds are wrong answers.

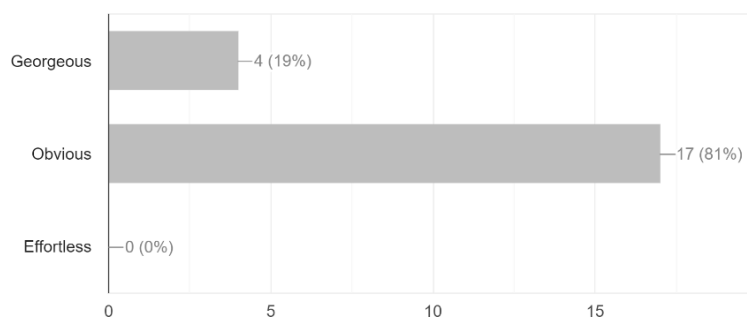
2) *The options*

In this section, the writers do the same thing like the matching picture section. The writers take two samples of the questions which shows significant difference between first and second chart. The first chart below represents the students’ answer for question number 6. While the second chart represents the students’ answer for question number 9.



1.9

(The chart of students’ answer for question 6)



1.10

(The chart of students’ answer for question 9)

The first chart shows 95,2% of sample population answered the question number six correctly by choosing ‘Wealthy’ as the correct answer. While 4,8% of the sample population answered incorrectly by choosing ‘Effortless’ as the answer for question number six.

The second chart shows 81% of population chose ‘Obvious’ which is the correct answer for question number nine. The other answer ‘Gorgeous’ is chosen by 19% of sample population.

The charts of response for questions 7, 8, and 10 are not shown in this section, because the students' responses do not show significant difference. Therefore, the writers will explain responses of questions 7, 8 and 10 in paragraphs.

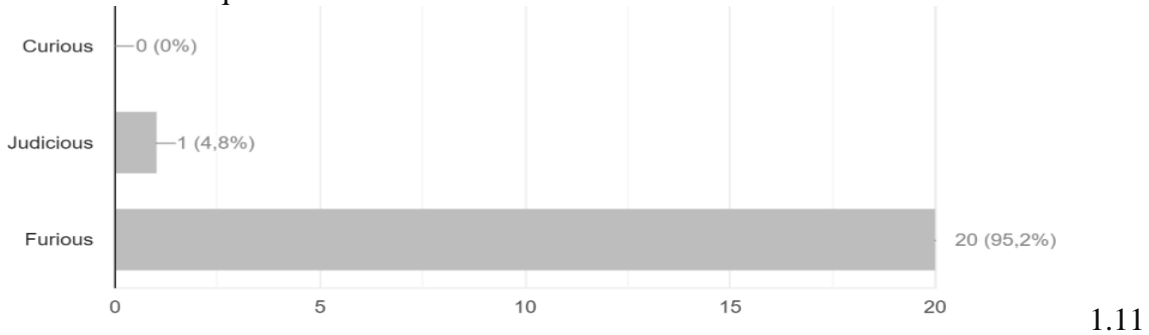
For question 7, around 85,7% of population choosing the right answer "Costly". The rest around 9.5% chose "Soaked" and 4,8% chose "Wealthy" both of are wrong answers.

The responses for question 8, same as the previous responds around 85,7% of population choosing "Effortless" is the right answer. The rest 14,3% chose "Obvious" is the wrong answer.

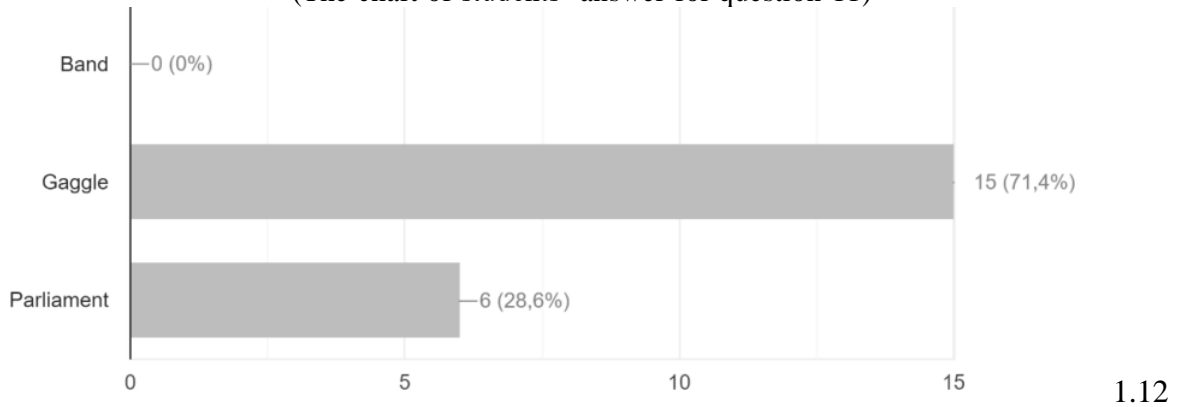
Question number 10, it is similar with responses question 8. Around 85,7% of population answer correctly by choosing "Massive". While the rest 14,3% chose "Gorgeous" is the wrong answer.

3) *The multiple choices*

Same as the previous parts, the writers take two samples of the questions in this part and compare the both results. The first chart represents the students' answers for question number 11, and the second chart is for question number 15.



(The chart of students' answer for question 11)



(The chart of students' answer for question 15)

The first chart shows 95,2% of population chose "Furious" as the correct answer, and 4,8% chose "Judicious" which is the wrong answer. For the second chart it shows that 28,6% of population answer the question correctly by choosing 'Parliament' for the right answer. The rest of around 71,4% of population answer the question incorrectly by choosing 'Gaggle' the wrong answer.

Questions 12 to 14 the writers will explain in paragraphs as mentioned at the previous sections. On question 12, around 90,5% of population answer the question correctly by choosing "Tower". The rest around 9,5% answer the question incorrectly by choosing "Leap".

Other responses on question 13, 61,9% of population choosing the right answer “Conviction”. While the rest 28,6% chose “Conscious” and 9,5% chose “Copious” both are the wrong answers.

For question 14, 85,7% of population choosing the right answer “Curious” and the rest 14,3% choosing wrong answer “Auspicious”.

Conclusion

From the questionnaire to test, there are some parts that the writers highlighted. First, more than 50% of sample population agree that social media can help them for mastering their business English vocabulary. They agree after watching English content, it enriches them, and they learn new vocabulary. In addition, they also believe it is easy to find accounts that contains business English education in social media.

Second, Youtube is the most chosen among all applications by most of sample as the tools for learning. Followed by Instagram and Tiktok as the side options for improving their English vocabulary.

Third, the average score of the test is 66%. It shows more than half of the sample have a good understanding of business English vocabulary.

In conclusion, social media: Instagram, YouTube, and TikTok might be the tools for non-business learners in mastering their business English vocabulary.

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ANALYSIS OF BANK HEALTH LEVEL COMPARISON BEFORE AND DURING THE COVID-19 PANDEMIC

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ABSTRACT: This study aims to analyze and test the ratio of health levels in state-owned banks before and during the COVID-19 pandemic. The object of this research is the State-Owned Bank. This type of research uses a quantitative approach. Research methods use descriptive and comparative. The population of 4 in state-owned banks uses 4 samples with a saturated sampling technique. Assessment analysis uses rec (Risk Profile, Earning and Capital) methods as measured by NPL, LDR, ROA, NIM, CAR ratios. As well as testing against differences using the Wilcoxon Signed Rank Test and the paired sample T-test previously conducted descriptive statistical tests. The results showed that before and during the COVID-19 pandemic there was a significant difference in risk profile factors with NPL and LDR ratios, also earnings with ROA, NIM and CAR ratios.

Keywords: COVID-19 Pandemic, Bank Health Level, State-Owned Banks, REC Methods, Comparison Tests.

INTRODUCTION

The world of banking is an industry engaged in finance related to economic activity that has a strategic role in economic growth. The strategic role is the implementation of the main function of the bank as a support for the nation's economic activity and financial intermediary or financial role, namely as a financial institution tasked with collecting and distributing funds in the form of loans or credit. With these important functions and tasks, the bank carries out its operational activities based on the precautionary principle because the bank is expected not only to seek profit, but also improve people's standard of living. In addition to these general functions, the bank also has a special function as an agent of trust where the bank must form a trust between the parties concerned. Public trust becomes an important factor in the continuity of a bank business. In addition, the bank also has a function as an agent of service where the bank provides services related to the economy and financial services to the community. The last function of the bank is as an agent of development where the bank becomes an institution that mobilizes funds to support the economic development of a country.

At the end of 2019, the world was shocked by a phenomenon that swept across the country. The Covid-19 virus has had a profound impact on all aspects of people's lives. The outbreak has had a significant impact on several sectors, not least the affected banking financial system. The government conducts various policies to break the chain of spread of the virus, like imposing Large-Scale Social Restrictions (PSBB) and regulating the way of working and doing daily activities from home (Work From Home), so that the lack of maximum business activities of the company

has an impact on the company's declining income and increases the risk of bankruptcy or the risk of liquidation of the company, then can result in a cut in employee salaries until the unilateral reduction of labor needs or layoffs (Termination of Employment). Millions of people who work in the formal sectors lose their jobs, Based on data from the Ministry of Manpower on April 13, 2020, 1.2 million formal workers were laid off and 212.4 thousand were laid off (Kumparan, 2020a) this has an impact on people who are disrupted by income and even lose income. The impact of the pandemic on the banking world itself is that various problems began to arise, not a few debtors who experienced problems in the process of repayment of financing or credit. As a result of the problematic financing, bank profits and interest decreased, the bank's health can be disrupted.

Based on (Bank Indonesia Regulation No. 13/1/PBI/2011 concerning the assessment of the soundness of commercial banks) (Bank Indonesia Circular Letter No.13/24/DPNP) Banks are required to conduct an individual Bank performance assessment using a risk approach (Risk-based Bank). Rating), and this assessment is referred to as the RGEC method as referred to in article 2 paragraph (3). Research on the comparison of health levels using the RGEC method has previously been carried out by (Fitriana, 2015) with the title of Soundness Level of Islamic State-Owned Banks with Conventional State-Owned Banks: RGEC Method (Risk Profile, Good Corporate Governance, Earning and Capital). The results of this study are that there are only 3 factors that show there is no significant difference in the soundness of Islamic State-owned Banks and Conventional State-Owned Enterprises, namely the Risk Profile ratio of NPF/NPL, FDR/LDR, GCG and Capital with a CAR ratio while the factors that indicate there are a significant difference is in the Earning Ratio ROA factor. This is different from the research conducted by (Rahmawati & Yanti, 2019) with the title Comparison of the Soundness Level of Conventional Banks and Islamic Banks with the Risk Profile, Good Corporate Governance, Earning and Capital Methods. shows that there is a significant difference in the Risk Profile factor with the ratio of NPL and LDR, there is no significant difference in the GCG factor and the Earning factor with the ROA and BOPO ratio and the Capital factor with the CAR ratio.

LITERATURE REVIEW

Definition of the Bank

Based on Law No. 7 of 1992 concerning banking that a bank is an institution that has the function to manage public funds by collecting funds and channeling funds to the community to improve the standard of living of the community in various kinds of products such as deposits, deposits, loans, and so on. Parties who have excess funds can deposit the funds in the bank, and then the bank can channel the stored funds to parties who need funds. Thus, the bank has a very important role in supporting the life of the community, either individually or in groups. The existence of complementary roles with banking intermediaries can improve the welfare of people lives.

Definition of Bank Health Level

Financial institutions such as banks do not escape the attention of stakeholders. This is because the bank's financial condition must remain stable considering that the funds used are public funds. Banks are said to be healthy when banking activities can run properly and can fulfill their obligations following the provisions of the applicable regulations. Bank health can be used in determining the right strategy for dealing with competition between banks. Thus, a healthy bank can survive and be able to carry out its duties properly. While for Bank Indonesia the bank's health

is used as a means of setting regulations which in turn results in the overall condition of the bank (Budisantoso & Nuritomo, 2017).

Risk Profile, Earning, Capital (REC) Methods

Risk Profile

Based on (Bank Indonesia Regulation No. 13/1/PBI/2011 on Health Assessment of Commercial Banks Article 7) Risk Profile Factor Assessment is an activity in assessing the risks contained in the bank as well as an activity used to measure the quality of management strategies applied to risks that arise in banking operational activities. Risk that must be assessed consists of 8 (eight) types of risks, namely Credit Risk, Market Risk, Operations Risk, Liquidity Risk, Law Risk, Strategic Risk, Compliance Risk, and Reputation Risk. Risk profile is a factor to assess financial risk in a company or the quality of the application of risk management in the bank's operational activities. The application of risk management is the process of anticipating risk so that losses do not occur to the company. The study only measured credit risk and liquidity risk, because this type of research uses a quantitative approach.

a. Credit Risk

Problem credit poses a credit risk. Problematic credit arises due to credit channeled to customers who can not return on time. Loans distributed by banks are non-refundable to the debtor for certain reasons. The greater the amount of problematic credit owned by a bank, the worse the bank's credit condition and potentially cause financial problems (Permatasari & Sudjana, 2015).

b. Liquidity Risk

The bank provides credit to its customers with a source of funds derived from customer deposits. The customer's deposits consist of current accounts, savings, and deposits. The loan To Deposit Ratio (LDR) is one of the tools to measure the liquidity of an entity where the ratio can show whether the credit issued by the bank can meet the needs of customers who deposit funds when the customer is about to withdraw funds from the money that has been used by the party to channel funds credit. (Permatasari & Sudjana, 2015).

Earnings (Rentability)

Earnings is an indicator that can be used as a basis for banking's ability to generate a profit (Agustina & Panjaitan, 2017). The rentability ratios used in the study were Return On Assets (ROA) and Net Interest Margin (NIM).

a. Return On Assets (ROA)

It is an analysis to find out how effective the company is to manage assets to increase profits in the company (Subramanyam K.R, 2013).

b. Net Interest Margin (NIM)

Measure the ability of productive assets in generating income in the form of interest. Activities carried out by banks in extending credit can lead to cash gains from interest arising from these transactions. In addition, the bank also has an interest that they have to pay to customers who deposit money in the bank. The difference between interest income and interest expense that must be paid will produce net interest that will be earned by the bank each period. This can have an

impact on earning assets owned by banks in the form of lending, securities, participation and other plantings (Permatasari & Sudjana, 2015).

Capital (Capital)

This ratio is used to measure the capital adequacy of a bank which is calculated based on the comparison of the amount of bank capital with weighted assets according to credit risk, market risk and operational risk (Prastyananta & Muhamad, 2016).

Previous Researchers

Table 1 Previous Research

No	Name and Year of Research	Research Results
1	(Novianti & Somantri, 2021)	There is a significant difference in the assessment of the soundness of banks using the CAMEL method with CAR, NPM, NIM ratios, and the RGEC method using BOPO, NIM, CAR ratios.
2	(Marwanto, 2013)	Three factors indicate that there is no significant difference in the level of soundness between Islamic banks and conventional banks, namely Risk Profile, GCG and capital factors. While earnings show there is a significant difference
3	(Zettyra & Mutia, 2019)	The NPL, LDR and ROA ratios that occur in conventional banks and Islamic banks are different, while when viewed from the GCG, NIM and CAR ratios that occur in commercial banks and Islamic banks, there is no significant difference.

Source: Data Processed By Researchers

Hypothesis

1. Based on a general description that it is known that non-performing loans increased between before and during the COVID-19 pandemic and credit disbursed decreased during the COVID-19 pandemic, so the researchers took the following hypothesis:
H1: There are differences in Bank Health Levels Based on Risk Profile factors before and during the COVID-19 pandemic
2. Based on the general picture that it is known that profit before tax and net interest income decreased between before and during the COVID-19 pandemic, so the researchers took the following hypothesis:
H2: There are differences in Bank Health Levels Based on Earning factors before and during the COVID-19 pandemic
3. Based on the general description that it is known that capital decreased between before and during the COVID-19 pandemic, so the researchers took the following hypothesis:
H3: There are differences in Bank Health Level Based on Capital factors before and during the COVID-19 pandemic

METHODS

Research Methods

The methods used in this study are descriptive and comparative methods. Descriptive research method is a method used to describe or describe data that has been collected while comparative research methods are a comparing research (Sugiyono, 2013). This type of research is quantitative, the data source used in this study is secondary data obtained from the official banking website.

Population and Technique of Sample Determination

The population in this study were 4 state-owned banking. In this study the entire population was selected as a sample of the study. This researchers used the census method based on the provisions put forward by (Sugiyono, 2017) which said that: "Saturated sampling technique is a technique of determining samples where all members of the population are used into samples". Another term of saturated sample is census. So that the sample is 4 banks.

Operationalization Variable

Table 2 Operationalization Variable

Variable	Definition Variable	Indikator	Skala
Bank Health Level	Bank health is an ability possessed by a bank to fulfill its operational activities including fulfilling obligations that must be fulfilled properly by predetermined rules. (Budisantoso & Nuritomo, 2017)	1. Risk Profile a. Credit Risk $NPL = \frac{\text{Problem Credit}}{\text{Total Credits}} \times 100\%$ (Tiono & Djaddang, 2021) b. Liquidity Risk $LDR = \frac{\text{Credit}}{\text{Third party funds}} \times 100\%$ (Tiono & Djaddang, 2021)	Ratio
		2. Earnings (Rentability) a. Return On Assets (ROA) $ROA = \frac{\text{Profit Before Tax}}{\text{Total assets}} \times 100\%$ (Zettyra & Mutia, 2019) b. Net Interest Margin (NIM) $NIM = \frac{\text{Net Interest Income}}{\text{Productive Assets}} \times 100\%$ (Montolalu & Murni, 2018)	Ratio
		3. Capital (<i>Capital</i>) $CAR = \frac{\text{Capital}}{\text{ATMR}} \times 100\%$ (Beby, 2020)	Ratio

Source: Data Processed By Researchers

FINDINGS

Descriptive Statistics

Table 3 Results of Descriptive Statistical Analysis

Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
NPL before COVID-19 Pandemic	16	1.75	4.78	2.6769	.75223
NPL during COVID-19 Pandemic	16	2.38	4.91	3.5081	.81339
LDR before COVID-19 Pandemic	16	88.64	114.24	98.2250	9.03553
LDR during COVID-19 Pandemic	16	82.58	114.22	90.7275	9.55884
ROA before COVID-19 Pandemic	16	.13	3.50	2.4437	1.10433
ROA during COVID-19 Pandemic	16	.54	3.55	1.6950	.96522
NIM before COVID-19 Pandemic	16	3.32	7.02	5.2138	1.30002
NIM during COVID-19 Pandemic	16	3.06	6.66	4.6119	1.10265
CAR before COVID-19 Pandemic	16	16.88	22.55	19.8312	1.99487
CAR during COVID-19 Pandemic	16	16.07	20.61	18.6287	1.43656
Valid N (listwise)	16				

Source: Secondary Data Processing Results with SPSS Software

Based on the table, NPL before the COVID-19 pandemic has a lower average value of 2.6769 when compared to the average NPL during the COVID-19 pandemic of 3.5081. This means that before the COVID-19 pandemic had a better ability to manage its credit. While NPL during the COVID-19 Pandemic did not have a good ability in managing its credit. The lower the NPL, the better the soundness of the bank and vice versa, the higher the NPL, the worse the soundness of the bank.

LDR Before the COVID-19 Pandemic had a higher average value of 98.2250 when compared to the average LDR during the COVID-19 Pandemic which was 90.7275. This means that LDR during the COVID-19 pandemic has a better ability to maintain its liquidity level. While the LDR before the COVID-19 Pandemic did not have a good ability in maintaining its liquidity level. The lower the LDR, the better the soundness of the bank and vice versa, the higher the LDR, the worse the soundness of the bank.

ROA Before the COVID-19 Pandemic had a higher average value of 2.4437 when compared to the average ROA during the COVID-19 Pandemic which was 5.2138. This means that the greater the ROA before the COVID-19 pandemic, the greater the level of profit achieved by the bank and the better the bank position of asset use. While ROA during the COVID-19 Pandemic indicates a lack of bank management ability in managing assets to increase profits. The lower the ROA, the worse the soundness of the bank and vice versa, the higher the ROA, the better the soundness of the bank.

NIM Before the COVID-19 Pandemic had a higher average value of 5.2138 when compared to the average NIM during the COVID-19 Pandemic which was 4.6119. This means that NIM before the COVID-19 pandemic has a better ability to generate interest income. While NIM during the COVID-19 Pandemic did not have a good ability to generate interest income. The lower the NIM, the worse the soundness of the bank and vice versa, the higher the NIM, the better the soundness of the bank.

CAR Before the COVID-19 Pandemic had a higher average value of 19.8312 when compared to the average CAR during the COVID-19 Pandemic which was 18.6287. This means that CAR before the COVID-19 pandemic has a better ability to bear the risk of any credit / productive assets that are at risk. While CAR during the COVID-19 Pandemic lacks the ability to be able to bear the risk of any credit / productive assets that are at risk. The lower the CAR, the worse the soundness of the bank and vice versa, the higher the CAR, the better the soundness of the bank.

Test of Normality

Table 4 Normality Test Results

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
NPL before COVID-19 Pandemic	.176	16	.200*	.885	16	.047
NPL during COVID-19 Pandemic	.162	16	.200*	.923	16	.187
LDR before COVID-19 Pandemic	.263	16	.004	.772	16	.001
LDR during COVID-19 Pandemic	.208	16	.063	.779	16	.001
ROA before COVID-19 Pandemic	.241	16	.013	.833	16	.008
ROA during COVID-19 Pandemic	.176	16	.200*	.922	16	.181
NIM before COVID-19 Pandemic	.151	16	.200*	.896	16	.070
NIM during COVID-19 Pandemic	.156	16	.200*	.930	16	.240
CAR before COVID-19 Pandemic	.119	16	.200*	.924	16	.196
CAR during COVID-19 Pandemic	.153	16	.200*	.923	16	.191

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Secondary Data Processing Results with SPSS Software

Based on table 3 normality test results using the Shapiro-Wilk test because of a sample of 16 research data from 4 state-owned banks. There are several sub variables that are distributed normally, namely > 0.05 , which is tested using the Paired Sample T-test, while those that do not distribute normal < 0.05 are tested using the Wilcoxon Signed Rank Test.

Wilcoxon Signed Rank Test

Table 5 Wilcoxon Signed Rank Test Results

Test Statistics^a

	NPL during COVID-19 Pandemic - NPL before COVID-19 Pandemic	LDR during COVID-19 Pandemic - LDR before COVID-19 Pandemic	ROA during COVID-19 Pandemic - ROA before COVID-19 Pandemic
Z	-3.155 ^b	-3.309 ^c	-2.896 ^c
Asymp. Sig. (2-tailed)	.002	.001	.004

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

Source: Secondary Data Processing Results with SPSS Software

Based on table 4 results of the Wilcoxon Signed Rank Test showed that NPL Before the COVID-19 Pandemic and During the COVID-19 Pandemic was obtained by Asymp Sig. (2-tailed) of 0.002 then according to the provisions if significance $0.002 < 0.05$ means that there is a significant

difference Before the COVID-19 Pandemic and during the COVID-19 Pandemic, so the hypothesis is accepted. This happens because many people fail to pay because of the impact of the pandemic people lose income. So that the number of problematic credits during the COVID-19 pandemic is higher than before the COVID-19 pandemic.

In the LDR Ratio, the results of the Wilcoxon Signed Rank Test showed that LDR before the COVID-19 Pandemic and during the COVID-19 pandemic was obtained by Asymp Sig. (2-tailed) of 0.001 then according to the provisions if significance $0.001 < 0.05$ means that there is a significant difference Before the COVID-19 Pandemic and during the COVID-19 Pandemic, so that the hypothesis is accepted. It happens that LDR decreased during the COVID-19 pandemic because the credit channeled decreased, in the pandemic times banks were more careful in channeling their credit to reduce the risks that occurred such as default. The ability of banks to return funds from the dedicated community of the bank is healthy in other words safe limits or vice versa.

In the ROA ratio, the results of the Wilcoxon Signed Rank Test showed that ROA (Return On Asset) before the COVID-19 Pandemic and during the COVID-19 Pandemic was obtained by Asymp Sig. (2-tailed) of 0.004 then according to the provisions if significance $0.004 < 0.05$ means that there is a significant difference Before the COVID-19 Pandemic and during the COVID-19 Pandemic, so the hypothesis is accepted. This happens because in this pandemic period banks are very careful in distributing credit so that the decline in potential new debtors from before the COVID-19 pandemic in addition to existing credit has been adjusted through stimulation or policies provided by the government. Many communities are restructuring, in addition, during the COVID-19 ROA pandemic become depressed due to the emergence of backup burdens.

Paired Sample T-test

Table 6 Paired Sample T-test Results

Paired Samples Test

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Paired Sample 1	NIM before Pandemic COVID-19 - NIM during Pandemic COVID-19	.60187	.38424	.09606	.39713	.80662	6.266	15	.000
Paired Sample 2	CAR before Pandemic COVID-19 - CAR during Pandemic COVID-19	1.20250	2.04823	.51206	.11108	2.29392	2.348	15	.033

Source: Secondary Data Processing Results with SPSS Software

Based on Table 5 results of the Paired Sample T-test showed that NIM Before the COVID-19 Pandemic and during the COVID-19 Pandemic was obtained by Asymp Sig. (2-tailed) of 0,000 then according to the provisions if the Significance of $0,000 < 0.05$ means that there is a significant difference Before the COVID-19 Pandemic and during the COVID-19 Pandemic, so that the hypothesis is accepted. The first advantage of banking is interest on credit channeled, in this pandemic conditions many people default on credit, and the impact of the restructuring will certainly reduce the ability of banks to obtain profits that are not maximal.

Then the CAR ratio based on the results of the Paired Sample T-test shows that car before the COVID-19 pandemic and during the COVID-19 pandemic obtained by Asymp Sig.(2-tailed) of 0.033 then according to the provisions if the significance of $0.033 < 0.05$ means that there is significant difference Before the COVID-19 Pandemic and during the COVID-19 Pandemic, so the hypothesis is accepted. Based on data processed by CAR researchers during the COVID-19 pandemic, it shrank as the value of risk-weighted assets (ATMR) increased but was not offset by capital growth. ATMR.

CONCLUSION

The bank's health level is based on risk profile factors measured using the NPL ratio, it is known that there is a significant difference in NPL ratio between before the COVID-19 pandemic and during the COVID-19 pandemic. While the Risk Profile measured using the LDR ratio is known that there is a significant difference in the LDR ratio between before the COVID-19 pandemic and during the COVID-19 pandemic.

The level of health of banks in terms of earning factors measured using the ROA ratio is known that there is a significant difference in THE ROA ratio between before the COVID-19 pandemic and during the COVID-19 pandemic. While earnings measured using nim ratios are known that there is a significant difference in NIM ratio between before the COVID-19 pandemic and during the COVID-19 pandemic.

The level of health of banks in terms of capital factors measured using the CAR ratio is known that there is significant difference in CAR ratio between before the COVID-19 pandemic and during the COVID-19 pandemic.

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CARBON EMISSION DISCLOSURE BASED ON A FINANCIAL OVERVIEW OF FIVE ASEAN COUNTRIES

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Abstract: Carbon emission disclosure is a form of transparency and corporate responsibility to stakeholders to overcome the impact of global warming. This study aims to determine the effect of organizational visibility, profitability, financial distress, leverage, and regulatory pressure on the carbon emission disclosure by oil and mining sector companies listed on the stock exchanges in five ASEAN countries: Indonesia, Malaysia, Singapore, Philippines, and Vietnam. The research method uses quantitative methods with secondary data types. The sample is collected using purposive sampling method with 50 companies for four years period (2017-2020). Carbon emission disclosure is measured by 21-items of Carbon Disclosure Index (CDI), which is analyzed using multiple linear regression. The result shows that organizational visibility and regulatory pressure affect the carbon emission disclosure, meanwhile profitability, financial distress, and leverage do not affect the carbon emission disclosure.

Keywords: voluntary disclosure, financial review, carbon emission disclosure.

Introduction

Environmental issues continue to develop in the community both nationally and internationally, which are often followed by serious crises, one of which is the current environmental crisis (Dewi & Dewi, 2017). Global warming results in an increase in the temperature of the earth over a long period, and the sun's heat can't be reflected because it is held back by a layer of gases resulting from the greenhouse effect. Climate change certainly has an impact on people's lives, such as decreasing water quality, decreasing water quantity, changing habitats, and decreasing agricultural productivity. Based on findings from the Center for International Forestry Research (CIFOR), forest and peatland fires are the largest contributors to carbon emissions from 1997 to 2015 in the marine waters of the Southeast Asian region. 97% of the total 884 million tons of CO₂ released that year came from forest fires that occurred in Indonesia. The presence of the largest El Nino also exacerbates the situation, resulting in a longer period of drought and widespread fires.

The Kyoto Protocol is a regulation on climate change that contains the obligation of an industrialized country to reduce greenhouse gas emissions consisting of carbon dioxide, nitrous oxide, sulfur hexafluoride, methane, HFCs, and PFCs (Hapsoro & Ambarwati, 2018). The Kyoto Protocol regulates three flexible emission reduction mechanisms for industrialized countries. The three mechanisms are the Clean Development Mechanism (CDM), Joint Implementation (JI), and Emission Trading (ET).

Emission disclosure is important because it is a form of company transparency to stakeholders in dealing with the impacts of climate change and global warming (Carbon Disclosure Project, 2009). One of the efforts that companies can make in reducing carbon emissions is by disclosing these carbon emissions. Voluntary disclosure of the company's strategies, competitive targets, and projects to reduce carbon emissions can provide investors with a better understanding of the company's performance (Kalu et al., 2016). Carbon emission disclosure is also a form of corporate

responsibility that have a positive impact, namely by strengthening investor confidence in the company's financial capabilities.

On a global scale, the G20 as a forum for multilateral cooperation among European Union countries is increased their ambition to move together in fighting the climate crisis. This is related to the re-escalation of carbon emissions in 2021, especially in the G20 countries, in line with the resumption of post-pandemic economic and social activities, which initially experienced a decrease in the impact of government regulations regarding restrictions on social activities to overcome the epidemic. COVID-19.

At the ASEAN regional level, the ASEAN Economic Community (AEC) 2021 initiated a framework for cooperation in circular economy projects. The initiation of the cooperation is based on the awareness of the threat to economic resilience from resource scarcity and the unsustainable linear economic model. Based on the cooperation framework that has been initiated, it can be seen that ASEAN has an ideal vision that is inclusive in developing its economy, namely with a regional supply chain model based on a linear economic model that seeks to be transformed into a circular manner that develop the economic condition more sustainable. Three main objectives are agreed upon at the start of the ongoing cooperation, first, accelerating the transition of ASEAN as a low-emissions producing region and restoring ASEAN's development resilience in response to COVID-19. Second, opening up trade and investment opportunities to increase sources of income and food security according to a circular economy approach. Third, the placement of circularity as ASEAN's main resolution in realizing the targets of the UNFCCC and the Paris Agreements.

The Indonesian government commit to develop a blue economy that emphasizes the importance of good marine management to achieve a sustainable development agenda (Indonesian Ministry of National Development Planning, 2021). Management of marine resources and ecosystems is intended to be able to overcome the challenges of coastal and natural resource degradation, climate change, and marine pollution, as well as the socio-economic vulnerability of coastal communities affected by changes in marine and coastal ecosystem conditions. The development of the blue economy is expected to expand the use of opportunities for developing high-value-added economic activities, such as quality tourism, renewable energy development, circular economy, and marine resource-based processing industries.

The Indonesian government also encourages the implementation of a green economy, be it green energy, green finance, green technology, and green products, in line with the intense demand for climate change issues on the surface and the ongoing discussion about a green economy. In one of the acceleration steps, Indonesia is to join the Clean Energy Demand Initiative (CEDI), which is an initiative of the United States government that is willing to invest in the clean energy sector. The government has set many targets that must be achieved, such as the use of new and renewable energy, which is expected to have a share of 23 percent of primary energy by 2025. With this target, it is hoped that the reduction in carbon emissions can reach 29-41 percent based on the Nationally Determined Contribution (NDC) target by 2025, 2030, and net zero emissions by 2060 or sooner with international support.

Based on data from several previous studies show that the practice of carbon emission disclosure in companies in Indonesia is still relatively small. This is due to the implementation of the carbon emission disclosure in Indonesia, which is still voluntary disclosure. The voluntary disclosure isn't only practiced in Indonesia, but the carbon emission disclosure in the five ASEAN countries included in this study is also voluntary. It means the information provided is still quite limited in practice.

Several studies, including those conducted by Akhiroh & Kiswanto (2016), show that organizational visibility, profitability, managerial ownership, and audit committees affect the carbon emission disclosure. Another study conducted by Sari & Nisa (2020) shows that organizational visibility variables and regulatory pressures also affect the carbon emission disclosure. In addition, research by Novianti et al. (2020) shows that leverage affects the carbon emission disclosure.

Research on the carbon emission disclosure seen from a financial review, especially in the ASEAN scope, is still rarely done. Therefore, this study aims to examine the effects of organizational visibility, profitability, financial distress, leverage, and regulatory pressure on the carbon emission disclosure in oil and mining companies in five ASEAN countries.

Literature Review

Agency Theory

Agency theory explains the cooperative relationship between shareholders as principals who act to give authority to other people (agents), namely the management, to work and make the best decisions for the interests of the principal (Jensen & Meckling, 1976). To reduce the agency conflict, the management (agent) can take an approach that involves investors and creditors as the parties that supervise the performance of management (Kalu et al., 2016). Agency theory is used in this study because the role of managers in disclosing environmental information, including carbon emission disclosure, will be able to influence the principal and agent.

Legitimacy Theory

Legitimacy theory is a concept of the relationship between the company and its environment. The existence of company activities in the community raises public demand for companies to pay attention to environmental problems caused by their activities. Legitimacy theory encourages companies to take responsibility for their environment so that they look legitimate in the eyes of the community (Cahya, 2016). By making socio-environmental disclosures, the company feels that its existence and activities do not violate the norms and rules that apply in society (Solikhah et al., 2018). Carbon emission disclosure is one way for companies to build, maintain, and legitimize their company's contribution to environmental responsibility.

Stakeholder Theory

Stakeholders are stakeholders who influence and/or are influenced by the company, which includes shareholders, creditors, employees, customers, suppliers, public interest groups, and government agencies (Roberts, 1992). Stakeholder theory states that companies must act not only in their interests but must provide for stakeholders. Each stakeholder certainly has different expectations of the company, to make it happen, the stakeholders will put pressure on the company to make environmental disclosures (Ghomi & Leung, 2013). The pressure from stakeholders, in this case, is carbon emissions, forcing company management to disclose more information. Therefore, stakeholders have an important role in the company's social and environmental disclosures.

Carbon Emission Disclosure

Carbon emissions are the release of gases containing carbon into the Earth's atmosphere (Ecolife, 2011). One of the contributors to carbon emissions is the company's operational activities. Therefore, it is expected that companies can disclose their activities related to the carbon emission disclosure as a form of responsibility to the environment. Regarding the disclosure of the annual report, it is divided into two, namely: mandatory disclosure and voluntary disclosure. In Indonesia, the carbon emission disclosure is one of the environmental disclosures that is stated in PSAK No. 1 (revised 2017). Carbon emission disclosure can be seen from the disclosure of several items adopted from the Carbon Disclosure Index in the research of Prado et al. (2009) and GRI G4 emission items. According to Junior et al. (2014), GRI allows and recognizes everything as an external guarantee. GRI can also help orient users of the GRI guidelines on the responsibility of leaders to improve sustainability reporting assurance.

Organizational Visibility

Organizational visibility relates to the characteristics of the organization itself, while the visibility of issues relates to things that happen within the organization (Yu et al., 2016). Companies that have high visibility tend to get more attention and pressure from the public (Bowen, 2000). Every activity of the company, whether it is the treatment of its employees, guarantee of work safety, or the company's concern for the environment, is a special concern for the community. According to Burke & Logsdon (1996), organizational or company visibility refers to how the company can be observed and the company's ability to be recognized or recognized by stakeholders. Sari & Nisa (2020) find that organizational visibility has an effect on the carbon emission disclosure. The first hypothesis is formulated:

H1: Organizational visibility affects the carbon emissions disclosure.

Profitability

Profitability is one of the variables that describe the company's performance from the financial aspect. Profitability is used to measure the level of effectiveness of management performance, which is shown through the ability of management to generate maximum profits for the company (Hery, 2019). Companies with good financial conditions are more likely to disclose environmental information (Jannah & Muid, 2014). A high level of profitability supports the company to make their environmental disclosures (Irwhantoko & Basuki, 2016). Companies with good conditions have the capability to pay the human and additional resources needed for reporting and disclosing carbon emissions (Choi et al., 2013). According to Akhiroh & Kiswanto (2016), profitability has a significant effect on the carbon emission disclosure. The second hypothesis is formulated:

H2: Profitability affects the carbon emissions disclosure.

Financial Distress

Financial distress begins with liquidity pressures that become more severe over time, then continues to the condition of declining asset values, which results in the company being unable to pay its various financial obligations. This condition also affect the company's concern for the environment, in this case, environmental disclosure. Financial distress is reflected in the inability or unavailability of company funds to pay maturing obligations (Nandrayani et al., 2017). With this

condition, the company will choose not to disclose carbon emissions because of the costs that must be incurred. The third hypothesis is formulated:

H3: Financial distress affects the carbon emissions disclosure.

Leverage

Leverage shows how much equity is available to provide collateral against debt. Leverage refers to the use of fixed costs in an attempt to increase profitability (Van Horne & Wachowicz, 1995). The high level of leverages trigger the company to show the value of the company by disclosing the environmental impact and carbon emissions arising from its operational activities as a form of increasing company value. Environmental disclosures by companies with poor financial conditions will cause concern from creditors, suppliers, and customers (Choi et al., 2013). In addition, pressure from creditors is the reason companies prefer to concentrate on paying off all their obligations rather than disclosing carbon emissions (Suhardi & Purwanto, 2015). Research conducted by Irwhantoko & Basuki (2016) and Novianti et al. (2020) shows that leverage has an influence on the carbon emission disclosure. The fourth hypothesis is formulated::

H4: Leverage affects the carbon emission disclosure.

Regulatory Pressure

The government has great authority to pressure companies to be responsible for environmental conservation and to disclose carbon emissions (Suhardi & Purwanto, 2015). Disclosure by the company is one way that can reduce the threat of regulation and other negative impacts on the company's operating activities. This regulatory pressure is also one of the driving factors for companies to always care about the environment and disclose carbon emissions. From the research conducted by Sari & Nisa' (2020) shows the results have a positive effect on the carbon emission disclosure. The fifth hypothesis is formulated:

H5: Regulatory pressure affects the carbon emission disclosure.

Methods

The type of this study is quantitative research with secondary data derived from the annual reports of oil and mining companies listed on the stock exchanges of ASEAN countries. The companies categorized in this study are oil and mining industry classification companies listed on the stock exchanges of ASEAN countries, namely: Indonesia, Malaysia, Singapore, Philippines, and Vietnam during 2017-2020. The sampling technique of this research is the purposive sampling methods with certain criteria. Table 1 describe the research sample selection process.

Table 1. The Research Sample Selection Process

No.	Criteria	Total
1.	Oil and mining sector companies listed on Stock Exchanges in five ASEAN countries during the 2017-2020 period.	760
2.	Companies that are not listed for four consecutive periods and whose data is incomplete in the 2016-2018 annual report.	(128)
3.	Companies that are not included in the largest total asset category	(622)
The companies that meets the criteria		10
Number of samples (10 companies × 5 countries × 4 years)		200
Total research sample		200

Source: Data processed, 2022.

The measurement of all variables in this study are:

- Carbon Emission Disclosure is the dependent variable of this study that is measured by the Carbon Disclosure Index (CDI) according to the research of Prado et al. (2009) and GRI G4 emission items. If the entity or company makes a disclosure, it is given a score of 1, while the score is 0 for the entity or company that does not disclose.

$$CDI = \frac{\text{Total of fulfilled disclosure scores}}{\text{Maximum number of disclosure scores}}$$

- Organizational Visibility describes the state of a company that is seen and observed based on the size of the company. The size of the company reflects the amount of the company's operational activities. Based on the research by Farida & Sofyani (2018), company size is measured using the natural logarithm of the company's total assets.
- Profitability is the ability of a company to earn a profit or profit in a certain period. This profitability ratio also provides an overview of the effectiveness and efficiency of a company's management. This study uses Return on Equity (ROE) to measure profitability (Hermina & Suprianto, 2014).

$$ROE = \frac{\text{Net Profit}}{\text{Total Equity}}$$

- Financial distress is a condition where a company or individual can not generate sufficient income or profit. So it can not pay its financial obligations. Research conducted by Nisak & Yuniarti (2018) uses the Debt to Equity Ratio (DER) to calculate financial distress.

$$DER = \frac{\text{Total Liability}}{\text{Total Equity}}$$

- Leverage is the level of the company's ability to use assets and or funds that are a fixed burden in order to realize the company's goals to maximize company profits. Leverage shows how much equity is available to provide collateral against debt. In this study, leverage is proxied by the Debt to Asset Ratio (DAR), which is the ratio between total debt and total company assets (Mujiani, et al., 2019).

$$DAR = \frac{\text{Total Liability}}{\text{Total Asset}}$$

- Regulatory pressure, namely several regulations set by the government as an effort to pressure business actors to increase awareness and concern for the environment. The government, which is part of the company's stakeholders, has a role as supervisor of company activities. In this study, regulatory pressure is measured by a dummy variable, given a value of 1 if there is a state-owned company that is a shareholder of the company, whereas if all company shareholders are private companies, it is given a value of 0. This measurement is in accordance with the research of Dewi et al. (2019).

The hypothesis testing model in this study is a multiple linear regression model. Multiple linear regression analysis is used to analyze the effect of the independent variables, namely Organizational Visibility, Profitability, Financial Distress, Leverage, and Regulatory Pressure on Carbon Emission Disclosure of oil and mining companies listed on the Stock Exchanges in ASEAN countries. The regression equation formed in this study is:

$$CDI = a + b_1VO + b_2PROF + b_3FD + b_4LEV + b_5TP + e$$

Note:

a = Constant

CDI = Carbon Emission Index

OV = Organizational Visibility

PROF = Profitability

FD = Financial Distress
LEV = Leverage
TP = Regulatory Pressure

Findings

Descriptive Statistics Test Results

Table 2. Descriptive Statistics Test Results

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Carbon Emission Disclosure	200	0.000	0.714	0.29381	0.153293
Organizational Visibility	200	16.499	22.700	19.63550	1.429949
Profitability	200	-3.338	5.975	0.06138	0.491155
Financial Distress	200	-10.992	24.849	1.66057	3.130244
Leverage	200	0.011	5.589	0.54273	0.538215
Regulatory Pressure	200	0.000	1.000	0.16000	0.368000

Source: Data processed, 2022.

Table 2 presents descriptive statistics for a sample of 200 companies. Organizational Visibility (OV) has a minimum value of 16.499 and a maximum value of 22.700. The average value (mean) for this variable is 19.63550 and the standard deviation is 1.429949. This shows that on average, the sample companies are included in large company sizes because these companies have large total assets. The profitability (PROF) has a minimum value of -3.338 and a maximum value of 5.975. The mean value of this variable is 0.061338 and the standard deviation is 0.591155. This shows that the average sample company has a profit of 6.1338%. Financial Distress (FD) has a minimum value of -10.992 and a maximum value of 24.849. The average value (mean) of financial distress is 1.66057 and the standard deviation is 3.130244. This shows that the average sample company in this study has financial difficulties of more than 1, which means that the average company has an overvalued value or a carrying value greater than the fair value.

Leverage (LEV) has a minimum value of 0.011 and a maximum value of 5.589. The mean value is 0.54273 and the standard deviation is 0.538215. The standard deviation value, which is small compared to the average, indicates that the leverage variable used in this study does not vary. Regulatory Pressure (TP) has a minimum value of 0, which means the sample company is not included in State-Owned Companies (BUMN) and a maximum value of 1, which means the sample company is a BUMN company. The average value (mean) is 0.16 and the standard deviation is 0.368. This shows that most of the sample companies in this study are private companies. The Carbon Emissions Disclosure (CDI) has a minimum value of 0.00 and a maximum value of 0.714. The mean value of the dependent variable is 0.29381 and the standard deviation is 0.153293. From this average value, it shows that on average, the sample companies disclose carbon emissions of 29.381% of the total items that should be disclosed.

Classic Assumption Test Results

In testing the hypothesis using multiple linear regression, the classical assumption test must be met first. This study used the Kolmogorov-Smirnov normality test. The provisions in testing the normality of the data must have a significant value greater than 0.05. The test results show an Asymp.Sig (2-tailed) value of 0.058 or greater than 0.05, which means that the regression equation model in this study is normally distributed. The multicollinearity test is used to determine the presence of multicollinearity symptoms in a study by looking at the tolerance and VIF values.

Ghozali (2016) states that if data has a tolerance value of > 0.10 and a VIF value of 10, then there is no multicollinearity. In this study, the tolerance value of all variables is greater than 0.10 (VO is 0.973, PROF is 0.768, FD is 0.717, LEV is 0.905, TP is 0.937) and the VIF value is less than 10 (VO is 1.028, PROF is 1.302, FD of 1.395, LEV of 1.106, TP of 1.068). Therefore, it can be concluded that there is no multicollinearity in all variables in this study.

The results of the autocorrelation test were carried out with the Durbin Watson test which showed a DW value of 2.012 which was then compared with the values in the DW table. In the number of samples 200 obtained a DU value of 1.8199. The calculated DW value is in the area where there is no autocorrelation problem $DU < DW < (4-DU)$, namely $1.8199 < 2.012 < 2.1801$. The results of the heteroscedasticity test using the Glejser test show that all variables have a significance value above 0.05 or 5% (VO is 0.058, PROF is 0.495, FD is 0.927, LEV is 0.452, TP is 0.067). It can be concluded that there is no heteroscedasticity problem.

Hypothesis Testing Results

Table 3. Hypothesis Testing Results with Multiple Linear Regression

Variable	Regression Coefficient	Significance	Description
OV	0.041	0.000	H ₁ be accepted
PROF	-0.021	0.273	H ₂ be rejected
FD	-0.001	0.751	H ₃ be rejected
LEV	-0.022	0.261	H ₄ be rejected
TP	0.086	0.003	H ₅ be accepted
Constant	-0.513		
Adjusted R ²	0.170		
Nilai F	7.972	0.000	

Source: Data processed, 2022.

Based on the test results in Table 3, the multiple regression analysis model is formulated as follows:

$$CDI = -0.513 + 0.041VO - 0.021PROF - 0.001FD - 0.021LEV + 0.086TP + e$$

Table 3 shows that the significance value of F is $0.000 < 0.10$, meaning that the regression model in this study is a fit model. The test results show the Adjusted R² value of 0.170 or 17%, which means organizational visibility, profitability, financial distress, leverage, and regulatory pressure can explain the carbon emission disclosure by 17% then the remaining 83% is influenced by other variables not analyzed in this test.

The results of hypothesis testing with the t test in Table 3 show the regression coefficient value of 0.041 with a significance level of organizational visibility (OV) of 0.000, which is smaller than 5% or 0.05 and **H₁ is accepted**, meaning that organizational visibility has an effect on carbon emission disclosure. The results of this study are supported the research conducted by Sari & Nisa (2020), which explains that the organizational visibility variable affects the disclosure of carbon emissions. The larger the company, the more information the company provides in disclosing carbon emissions in its annual report or sustainability report.

Profitability has a regression coefficient of -0.021 with a significance level of 0.273. If the significance value is greater than 5% or 0.05, then **H₂ is rejected**. Based on the results of this test, it can be concluded that profitability has no effect on the carbon emission disclosure. The results of this study are consistent with the research of Sari & Nisa (2020) and Novianti et al. (2020) showing the same results that the profitability variable has no effect on the carbon emission

disclosure. This shows that companies with better profitability do not necessarily mean that they will disclose carbon emissions more widely. Carbon emission disclosure is still carried out even though the return on profit within the company (profitability) is in good condition or vice versa.

Financial Distress has a regression coefficient of 0.001 with a significance level of 0.751. If the significance value is greater than 5% or 0.05, then **H₃ is rejected**. Based on the results of this test, it can be concluded that financial distress does not affect the carbon emission disclosure. The results of this study are consistent with the research of Akhiroh & Kiswanto (2016) and Sari & Nisa (2020), which show that the financial distress variable does not affect the carbon emission disclosure. The level of financial distress does not affect the carbon emission disclosure. This finding also does not support the legitimacy theory, where companies with poor financial performance will find it more difficult to disclose carbon emissions.

Leverage has a regression coefficient of 0.001 with a significance level of 0.751. If the significance value is greater than 5% or 0.05, then **H₄ is rejected**. Based on the results of this test, it can be concluded that leverage has no effect on the carbon emission disclosure. This is in contrast to the findings of Irwhantoko & Basuki (2016) and Novianti et al. (2020), which state that leverage affects the carbon emission disclosure. This ineffectiveness is because companies with both high and low leverage prefer to be careful in making voluntary disclosures because it can increase the company's operating costs. The increase in operational costs will cause the company's financial burden to worsen. Companies prefer to use their resources to increase company productivity rather than make voluntary disclosures.

Regulatory pressure has a regression coefficient of 0.086 with a significance level of 0.003. If the significance value is less than 5% or 0.05, then **H₅ is accepted**. Based on the results of this test, it can be concluded that regulatory pressure has no effect on the carbon emission disclosure. The results of this study are in line with Sari & Nisa's (2020) research, which explains that regulatory pressure affects the carbon emission disclosure. This means that the greater the share ownership by the government in the company, the higher the carbon emission disclosure. Direct government involvement in the company's share ownership will give the government wider authority to carry out supervision.

Conclusion

This study aims to empirically examine the disclosure of carbon emissions from a financial review consisting of organizational visibility, profitability, financial distress, leverage, and regulatory pressures on oil and mining companies in five ASEAN countries. Based on the results of the research conducted, it can be concluded that organizational visibility and regulatory pressure affect the disclosure of carbon emissions. For example, profitability, financial distress, and regulatory pressure do not affect the disclosure of carbon emissions.

The results obtained in this study still have many limitations. This research still uses a narrow scope of research and the scope of short-term observations. This study can be developed by examining other industrial classification that contribute to the practice of green or blue economics. Future study are expected to combine the financial and non-financial factor that determine the disclosure of carbon emission disclosure. That two factors are balanced the real company performance reporting.

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Strengthening Village Owned Enterprises based on Business Selection Strategy and Village Potential in Balangan Regency

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Abstract: The development of village-owned enterprises is designed to improve the village's financial independence and resilience. Currently, the village-owned enterprises in Balangan Regency lack managerial and entrepreneurial skills while also not utilizing their surrounding local potential resources. As a result, the village-owned enterprises fall short in carrying out their role as the local economic engine. This research aims to analyze the strengthening of village-owned enterprises based on the business selection criteria and the village's potential in the Balangan Regency. This research uses an exploratory approach with the Competitive Profile Matrix analysis. The study shows that village-owned enterprises must start with a service-oriented business before going with renting, brokering, or financing approach. After the foundation of the enterprise is well established, they can explore the potential for trading and holding. Village-owned enterprises must also utilize their surrounding environment for the foundation of the business to ensure sustainability aspect of the business.

Keywords: Village-owned enterprises; resilience; local potential.

Introduction

The Covid-19 pandemic is a lesson for all countries to formulate the right strategy to overcome future crises and mitigate the economic crisis caused by the pandemic. One of them is the effort to overcome the crisis, namely by improving the quality of life through community empowerment, including those in rural areas. The Indonesian government improves community empowerment and economic independence through institutions fully managed by village communities, namely Village-Owned Enterprises (BUM Desa). In addition to increase empowerment and independence, Village-Owned Enterprises has a vital role in enhancing independence in development, especially in managing their own resources to optimize their income.

The institutional mechanism for Village-Owned Enterprises is to accommodate community economic activities in a professionally managed business entity based on the original potential of the village so that community businesses become more productive and active (Nurhayati, 2018). The institutional mechanisms itself is aimed to ensure the sustainability aspects and minimize the detrimental impact of future crises and towards the environment. The main problems surrounding the village welfare are; (1) a lot of local community service's activities have not been managed professionally; (2) the homogeneity of rural communities; and (3) untapped local resources (Widodo, 2017). Based on this condition, and with the issuance of Regulation of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration of the

Republic of Indonesia No. 21 of 2015 concerning Determination of Priority for the Use of Village Funds in 2016, triggering the formation of Village-Owned Enterprises. The number of Village-Owned Enterprises throughout Indonesia increased approximately 21.5 times in 2017 compared to 2014 (Nurhayati, 2018). This condition provides positive opportunities and optimism for the formation of Village-Owned Enterprises in each region, one of which is in Balangan Regency, South Kalimantan Province, to increase community economic empowerment and become part of the strategy to optimize small medium enterprise and local economics development.

The establishment of Village-Owned Enterprises in Balangan Regency is supported by the Balangan Regency Regional Regulation No. 12 of 2017 concerning the Establishment, Management and Management, and Dissolution of Village-Owned Enterprises. Currently, there are 94 Village-Owned Enterprises in Balangan Regency out of 154 existing villages. By the end of 2020, out of 94 Village-Owned Enterprises, there are 67 Village-Owned Enterprises making capital investment, and of those 67 Village-Owned Enterprises, only 45 Village-Owned Enterprises are active in carrying out business operations. Furthermore, out of 45 active Village-Owned Enterprises, only 20 Village-Owned Enterprises have a contribution to the village income which shows that Village-Owned Enterprises development in Balangan Regency has not been optimally managed.

Initial identification of the problem based on the direct observation, survei and results of the Focus Group Discussion (FGD) with relevant stakeholders is mainly because of the poor management of Village-Owned Enterprises in Balangan, especially on

1. Quality of the human resources,
2. Poor planning in development of the business unit,
3. Domination of village officials that lead to a conflict of interest, and
4. Frequent changes of management and business units.

Based on the description of these conditions, efforts to strengthen the Village-Owned Enterprises institutional need to be carried out by formulating the right strategy based on the original potential of the village.

Literature Review

1. Regional Economic Development

The main objective of regional economic development is to produce a high regional economic growth and reduce the level of poverty, unemployment, and income inequality faced by the region. It is also expected to create job opportunities for local people to increase their welfare and purchasing power to support their livelihood (Todaro & Smith, 2003). In addition, economic development is also described as: (1) the increase in the level of income per capita of the community is greater than the increase in population; and (2) the development of regional GDP is accompanied by the development of the level of modernization and reform of the economic structure (Kuncoro, 2006). Hence, within the concept of economic development, there are three values embedded: resilience, self-esteem, and freedom (Todaro & Smith, 2010).

Thus, it can be concluded that the region's economic development is characterized mainly by the people's level of per capita income. However, the strategic direction and objectives of regional economic development have shifted over time. The new development strategy focuses more on several aspects, such as integrated rural development, intensification of agriculture, intermediate technology, proper education, workforce expansion, promotion of SMEs and export

industries, job creation, improvement of nutrition and health, human resource development, income distribution, and institutional changes (Suryana, 2000).

2. Village

The definition of a village based on Law no. 6 of 2014 is a legal community unit with territorial boundaries that is authorized to regulate and manage government affairs and the local community's interests, recognized in the government system of the Republic of Indonesia. The village is given the authority to regulate and manage its affairs according to its needs and priorities. Indonesian government has allocated a village fund to foster village's economic growth. This means that village funds will be used to fund the overall village operations, especially in developing the infrastructure, business units, health center, education facilities, and other public utilities. However, considering that village funds are sourced from central government's spending, to optimize the use of village funds, the local government is given the authority to set priorities for the use of village funds to support village development programs and village community empowerment. Prioritizing the use of these funds remains in line with the authority that is the village's responsibility.

3. Village-Owned Enterprise

Village-Owned Enterprise is village business institutions managed by the community and village's government body to strengthen the village economy and are formed based on the needs and potential of the village. Village-Owned Enterprise is a pillar of economic activity in the village that functions as a social and commercial institution. As a social institution, it is sided with the interests of the community through its contribution to the provision of social services. Meanwhile, as a commercial institution, it aims to earn profit by offering local resources (goods and services) to the market. In carrying out its business, the principles of efficiency and effectiveness must always be emphasized. Village-Owned Enterprise as a legal entity, is formed based on the applicable laws and regulations and in accordance with the agreements established in the village community. Thus, the form of Village-Owned Enterprise can vary across villages in Indonesia. These various forms are in accordance with each village's local characteristics, potentials, and resources.

Based on the Regulation of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration No. 4 of 2015 concerning the establishment, management and management, and dissolution of village-owned enterprises, the establishment of Village-Owned Enterprise aims to:

1. Improve the village economy.
2. Optimize village assets to be useful for village welfare.
3. Increase community efforts in managing the village's economic potential.
4. Develop a business cooperation plan between villages or with third parties.
5. Create market opportunities and networks that support the public service needs of local people.
6. Create job opportunities; and
7. Improve the welfare of the community through the improvement of public services, growth, and equitable distribution of the village economy.

Furthermore, the establishment of Village-Owned Enterprise is carried out with six considerations:

1. Initiative of the village government or village community.

2. Village economic business potential.
3. Village natural resources.
4. Human resources capable of managing Village-Owned Enterprise.
5. Equity participation from the village government in the form of financing; and
6. Village assets submitted to be managed as part of the BUM Desa business.

Village-Owned Enterprise is not only a form of a social institution but also an economic institution that can meet the needs of the community. One of them is for the welfare of the community, especially the lower middle class who need business capital assistance to have their own business running, so that they can improve their standard of living and welfare (Pradana & Fitriyanti, 2019). The role of Village-Owned Enterprise in empowering rural communities has a profit orientation, which will later be divided for the benefit of the environment and community welfare (Putra A. S., 2015).

Methods

This type of research is qualitative with an explorative approach (explorative research). Data were collected through interviews, FGD, direct observation, questionnaires, and literature study. This study used a purposive sampling technique to collect data from government agencies and BUM Desa in Balangan Regency. This study will take a population of 45 villages actively carrying out business operations and focus on Lampihong District as the locus of the research.

The data analysis used is the Competitive Profile Matrix (CPM) analysis. It is an analytical tool to compare and identify a business, in this case, the Village-Owned Enterprise business with one another and identify the relative strengths and weaknesses so that Village-Owned Enterprise understands and focuses on parts that need to be improved or repaired. CSFs vary between different business sectors or even strategic groups and include both internal and external factors. This study uses 5 CSFs, including: (1) Service Offered; (2) Skilled or experienced personnel; (3) Profit Margin or contribution to village's treasury; (4) Economic Infrastructure; (5) Social Capital. Things that need to be considered in the CSF stage are, weights, ratings, and total scores.

Findings

Competitive Profile Matrix Breakdown

1. Service Offered

Identification of BUM Desa business services is carried out based on the number of businesses and types of businesses. The types of businesses carried out in 42 BUM Desa in 8 sub-districts are pretty diverse. Most BUM Desa, or 92% on average, have 1 type of business, 6% of BUM Desa have two types of business, and only 2% have six types of business. BUM Desa has six types of businesses, namely BUM Desa Maju Bersama, located in Sumber Rezeki Village, Juan District. There are 21 businesses carried out by 42 BUM Desa, including savings and financing, livestock, trade and services, and other types of businesses. The type of business with the most significant percentage, or 14% BUM Desa, is engaged in this type of business, moving into one type of business, namely savings and loans or Micro Business Credit. This type of business is found in 6 BUM Desa spread over four sub-districts, namely Juan, Halong, Away and Baturandi Districts. The second most significant type of business or 8%, namely, each type of business is a convenience store or primary food shop, farm, and procurement and supply of goods and services.

The next type of business is 6%, namely, ATK and photocopy shops; clean water services, water filling stations and gallons; Jaya BRILink services, cable TV services, electricity payment services; and brick making. The next type of business, or 4% of BUM Desa, runs food stalls and catering businesses; water and lake tourism; workshop gauze; agricultural drugstores; car and motorcycle washing services; and agriculture and plantations. The type of business with the slightest interest or only 2% of BUM Desa is screen printing services; rice milling; kelulut cultivation; waste disposal services; cultural market; oil palm, rice, and cassava collectors; and the palm sugar business.

The description of the number and type of business services shows that most BUM Desa are only focused on one business and do not develop the business based on existing potential. BUM Desa only looks at the economic aspect and does not have the motivation to take advantage of its potential in development efforts, both in the form of the number of businesses and the variety of types of companies. This condition shows that BUM Desa does not yet own the ability to identify business service needs or business opportunities, so it is necessary to take direction from policymakers.

2. *Skilled or Experienced Personnel*

Identification of the expertise and experience of HR management of BUM Desa is carried out at the head of BUM Desa, namely identification of age, education, and training that has been followed. Most BUM Desa is led by HR at a relatively young age or fall into the youth category. As many as 40% are 34 to 43 years, and this age is productive. In addition, each is 25% at 24 to 33 years and 44 to 53 years. The role of older people as leaders of BUM Desa is relatively less, namely 7.5% for those aged 54 to 63 years and 2.5% for those over 63 years. The following identification of human resources is education taken by the head of BUM Desa. The majority of the 43% are high school or high school graduates, followed by 34% with Diploma and bachelor's education, 14% only completed junior high school education, and the remaining 9% have elementary education.

Increasing knowledge and skills in the form of training activities for HR is carried out only by a small portion of BUM Desa. 62% of BUM Desa have never conducted training as part of an effort to increase the knowledge capacity and skills of HR in managing BUM Desa. There are two forms of efforts to increase knowledge and skills that BUM Desa mainly carries out with a percentage of 10% each, namely the management of BUM Desa and improving the education and training of BUM Desa. The second most common type of knowledge and skill improvement, or 7% each, was in BUM Desa school activities and management and administration training. The capacity-building activities for BUM Desa are only carried out by 5% of BUM Desa in Balangan Regency.

The description of the expertise and experience of BUM Desa HR based on age and education is quite good, which is dominated by productive age with a reasonably good education. However, this condition is not supported by efforts to increase knowledge and skills. In addition, the types of capacity-building training provided are also not many. Most BUM Desa has never received any training, so implementing BUM Desa management activities is not optimal. It is necessary to involve policymakers in improving the quality of BUM Desa's human resources regularly in accordance with the needs of each BUM Desa.

3. *Profit Margin or Contribution to Village's Treasury*

Identification of the contribution of BUM Desa profits to the Village treasury is carried out based on the contribution to PADes in 154 villages in Balangan Regency. Despite having quite a number of villages, there are only 42 active BUM Desa out of 94 BUM Desa; in fact, only 44% of the BUM Desa active have contributed to PADes.

Tabel 1. Active BUM Desa and Total Contribution to Village's Revenue

No.	Sub District	Village	BUM Desa	Village's Revenue
1.	Juai	Juai	Jaya Mandiri	± Rp250.000,-
		Buntu Karau	Jaya Bersama	± Rp1.300.000,-
		Bata	Maju Bersama	± Rp1.000.000,-
		Marias	Karya Bersama	Rp1.200.000,-
		Hukai	Hukai Mitra Mandiri	Rp15.000.000,-
		Sumber Rezeki	Maju Bersama	Rp17.800.00,-
2.	Halong	Binjai Punggal	Binjai Punggal	Rp3.830.000,-
		Liyu	Murewk Perayo	Rp3.000.000,-
		Baruh Penyambaran	Dukuh Permai	Rp1.200.000,-
3.	Awayan	Awayan	Harapan Baru	Rp20.000.000,-
		Tundakan	Amanah	Rp9.874.200,-
		Bihara Hilir	Sinar Maju Bersama Permai	Rp10.000.000,-
		Baramban	Sinar Harapan	Rp8.000.000,-
		Piyait	Sumber Rezeki	Rp5.200.000,-
4.	Batumandi	Mantimin	Mantimin Karya Mandiri	± Rp2.000.000,-
		Teluk Mesjid	Berkah	± Rp1.280.000,-
		Guha	Kerja Bersama	Rp2.500.000,-
		Gunung Manau	Gunung Manau	Rp578.000,-
5.	Paringin	Lamida Bawah	Malihu	Rp1.500.000,-
		Dahai	Dahai Maju Berkarya	Rp1.800.000,-

4. Economic Infrastructure

Unlike before, the identification of economic infrastructure was carried out only in Lampihong District with village qualifications that had BUM Desa. Eight villages have BUM Desa in Lampihong Subdistrict; from the eight villages, six villages in the BUM Desa category have made capital participation, and 3 of them are BUM Desa that are actively running business operations. Identification of the potential for economic facilities in Lampihong District, namely as many as 21 types of businesses, which are dominated by the type of grocery store or retail business, and retail gasoline stall business. The three businesses are relatively quite widely spread in every village. Of the 21 types of businesses spread across the eight villages, several villages have significant economic potential compared to other villages. Batu Merah Village and Lampihong Kanan Village, respectively, have a percentage of 28% and 21%, with various types of economic business.

The description of the economic infrastructure in Lampihong District shows that there are still many potential businesses that BUM Desa can carry out to complement the existing economic infrastructure in accordance with the community's needs. Of the eight current villages, only two have a diverse economic infrastructure; this is a perfect opportunity or potential for the other six villages.

5. Social Capital

Identification of social capital was carried out in 8 sub-districts covering 42 villages that had active BUM Desa. Identification includes six elements in social capital (Hasbullah, 2006), namely, (1) participation in a network; (2) reciprocity or reciprocity; (3) trust or trust; (4) social norms; (5) values; and (6) proactive action. Overall social capital is running well in the 42 villages covering the six elements. The quality of social capital is 60% excellent, 36% good, and 4% not good. Although overall it went well, from the existing six elements, only the element of participation in the network had the highest percentage value or 22% of the community's choice, followed by 17% on the element of social norms. Based on these conditions, the average community still plays an active role and participates in BUM Desa's development in their respective villages. The network's synergistic relationship between group members and the community is quite strong. The community still upholds social norms and good togetherness. While the other elements, namely 16%, were chosen by the community respectively on the element of trust and values, then 15% on the element of proactive action and the last choice, namely 14% on the element of reciprocity. The other four elements in social capital, namely the element of trust, indicate that there is a lack of public trust in the quality and performance of the apparatus and managers of BUM Desa.

Furthermore, the element of values shows the absence of the role of values in maintaining communal harmony in the development of BUM Desa. In the element of proactive action, it shows the lack of a strong desire from the community to participate or the lack of community initiative to participate in the development of BUM Desa. The next element of social capital, the element of reciprocity, shows that the desire to help and prioritize the interests of others or the public interest is still low.

The low quality of social capital affects the success of village development in general and the development of BUM Desa. This is in line because the current direction of development implementation places humans as one of the critical subjects. Therefore the concept of social capital becomes very important in supporting the human development model (Ontorael, Sondakh, & Laloma, 2015). The distribution of social capital quality from 8 sub-districts covers 42 villages; the highest percentage of excellent social capital is in Halong District at 11%, followed by 9% in Awayan District. Then 4% each in Paringin and South Paringin Districts, 2% each in Batumandi, Lampihong, and Tebing Tinggi Districts. Only Juai District is not in the category of excellent social capital quality or 0%. Social capital with the highest good quality, or 20%, is in Batumandi District, followed by 13% in Halong District and 11% in Juai District. In contrast, the other five sub-districts have a percentage below 5%. The village with the highest quality of excellent social capital is Hampa Raya Village, while the village with poor quality or the lowest social capital value is Pelajau Village.

In order to support community welfare through the development of BUM Desa, it is necessary to improve the quality of social capital. This is because social capital is a concept that is the answer to many development failures that only focus on economic problems, which ultimately forget about capital or other strengths owned by the community and the surrounding environment (Iyep, 2015). Although the quality of social capital is currently relatively good, some elements in social capital are categorized as poor. BUM Desa is essentially formed for the village community's welfare, so the community's role is critical in every stage of activities carried out by BUM Desa.

Therefore, the Balangan Regency Government needs to formulate a policy strategy to improve the quality of social capital not only as an effort to develop BUM Desa but also as part of efforts to support village development.

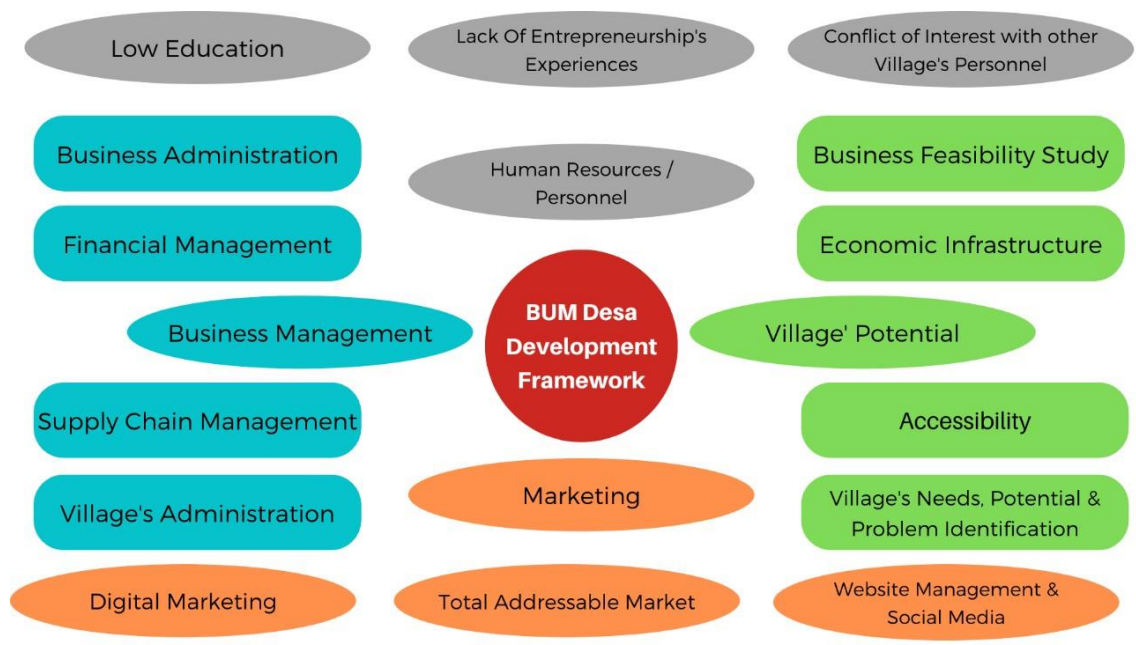
BUM Desa Development Strategy in Balangan Regency

The main problem faced by the village-owned enterprise, is the capacity of the personnel that runs the BUM Desa. The development strategy should be run in parallel, and carried out through human resource development, business development process, marketing network development, capital development, and increased participation of BUM Desa stakeholders with integrated programs or activities, which include:

1. Business development and entrepreneurship training according to business needs and growth.
2. Support the provision of resources to realize the industrialization of village commodities through BUM Desa.
3. Community communication forum periodically and continuously.
4. Organizing business meetings, seminars, or business visits, periodically and continuously.
5. Organizing partnership meetings between BUM Desa and other economic business actors.
6. Facilitation of increasing access to capital.
7. Facilitation of increasing access to partnerships or business and non-business cooperation.
8. Increasing access and facilitation to procure production and processing facilities and infrastructure, raw materials, auxiliary materials, and packaging.
9. Facilitate BUM Desa access to information sources and use of appropriate technology.
10. Empowerment and improvement of BUM Desa's access to local, national, and international sources of business information and supply chains.
11. Product promotion support, including the provision of promotional infrastructure.
12. Support development of marketing and distribution networks and expansion of marketing reach.
13. Organizing training and strengthening product marketing capacity through digital media.
14. Development programs or activities according to the needs of BUM Desa

Based on the identification of potential and strategies that have been carried out, focusing on four things, namely, (1) HR; (2) Marketing; (3) Village BUM business management; and (4) village potential management, the following is the development design of BUM Desa in Balangan Regency.

Figure 1 BUM Desa Development Design in Balangan Regency



(1) Human Resources

The main problem is creative, active, and skilled human resources. BUM Desa managers need creative people so that the products developed have good selling points and competitiveness in the market.

(2) Marketing

In today's digital era, BUM Desa managers must continue to adapt to market trends and appropriate marketing trends to reach targeted potential consumers. One of the most optimal marketing models for increasing business awareness and exposure is online marketing or digital marketing media.

(3) Village BUM Business Management

The managerial aspect and leadership capacity are crucial points in the business management of BUM Desa. The Village Head plays a vital role in leading the village to map the economic and social potential of the village community and articulate it in a sound BUM Desa planning system. Social capital also has a critical role in supporting the success of BUM Desa management and operations.

(4) Village Potential Management

Optimization of village potential can significantly affect the welfare of rural communities. By maximizing the village's potential, it is hoped that the rotation of the rural economy will increase, and employment will be created so that it impacts the emergence of new opportunities that can be utilized. The village holds various potentials of extraordinary natural wealth. However, developing requires human resources who are innovative, highly competitive, and responsive to dynamics.

Conclusion

There are five conclusions to answer the objectives of this study based on several existing findings, namely:

- 1) The development and formation of BUM Desa in the Balangan Regency seem forced, even though the village community, village government, and their apparatus do not yet fully understand how BUM Desa operates. In addition, the BUM Desa business ecosystem has not yet been formed and developed by the district government, so it has an impact on the number of BUM Desa businesses that have not been running, stalled, lost money, and went bankrupt.
- 2) The BUM Desa development model cannot only rely on regular training and assistance. Because BUM Desa requires a comprehensive pattern of assistance from the Upstream to Downstream aspects.
- 3) Upstream aspects of BUM Desa include registration of the legality of BUM Desa, preparation of AD/ART, Business Plans, Business Feasibility Analysis, and Market Surveys.
- 4) Downstream aspects of BUM Desa include operational, administrative, financial, administrative, reporting, production, sales, promotion, and marketing aspects.
- 5) The Mentoring Model must be implemented by practitioners and business actors directly so that the “transfer of knowledge” process can be more effective. The role of the Regency Government is as a facilitator and collaborator in BUM Desa business assistance activities.

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THE IMPACT OF SELF-EFFICACY AND JOB STRESS ON EMPLOYEE PERFORMANCE AT PT SUMBER FAJAR INTI ABADI IN PONTIANAK

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Abstract. This research study was intended to find out the impact of Self-Efficacy and Job Stress on Employee Performance. Self-Efficacy would help employees improve their performance, while Job Stress tends to make employee performance decrease. The type of research method used in this research was semi-descriptive research method, that is the combination of quantitative and qualitative research since this research used qualitative questionnaire in collecting the data. The data were processed with the help of software, so it became quantitative in the end. The total sample of this research was 71 respondents and the sampling technique used for this research study was the “slovin” formula. The method of data collection used for this research study was through the distribution of questionnaires and literature study. The data analysis was done with the help of the Statistical Package for the Social Sciences (SPSS) software version 25 for Windows. The findings of the study revealed that there was a simultaneous and positive impact between Self-Efficacy and Job Stress variables on the Employee Performance.

Keywords: Self-Efficacy, Job Stress, Employee Performance

Introduction

In this globalization era, human resources are important for every company to pay attention to since it could determine the success or failure of the company. Human resources are the main role in every activity of the company. Every company is required to be able to utilize human resources as optimally as possible, with the aim of the company having a competitive advantage. Employee performance is the way the human resources of a company work in a certain period. Good human resource performance tends to produce good company performance, while poor human resource performance tends to produce poor company performance. The factors that might influence human resource performance according to Armstrong and Baron (1998: 16) could include: the first is *personal factors*, indicated by the level of skills, competencies possessed, motivation, and individual commitment; the second is *leadership factors*, determined by the quality of encouragement, guidance, and support provided or carried out by managers; the third is *teamwork factors*, indicated by the quality of support provided by co-workers; the fourth is *company management system factors*, indicated by the work system and facilities provided by the organization; and the fifth is *contextual/situational factors*, indicated by the high level of pressure and changes in the internal and external environment. In addition, the performance of employees of a company can be influenced by several factors such as *self-efficacy* and *job or work stress* variables.

Self-efficacy refers to a person's belief in his/her ability to achieve different outcomes successfully according to their actions. Self-efficacy could also mean as a belief that individuals have their ability or inability to exhibit a certain behavior or set of behaviors. Therefore, the concept of self-efficacy relates to the extent to which individuals are able to have the abilities, potential, and tendencies that exist in themselves to be integrated into certain actions in overcoming situations that may be faced in the future. According to Bandura (cited in Shofiah, 2014: 221), there are several factors

that might influence self-efficacy, the first is experience of success (mastery experiences), success, that is often obtained, will increase a person's self-efficacy, while failure will reduce self-efficacy, the second is social persuasion, information conveyed verbally by someone, who is influential, is usually used to convince someone that he/she is quite capable of doing a task, and the third is physiological and emotional states, high self-efficacy is characterized by low levels of stress and anxiety, on the other hand, self-efficacy is characterized by low levels of stress and anxiety. Low self-efficacy is characterized by high levels of stress and anxiety.

Job or work stress is a condition of tension that creates a physical and psychological imbalance, which affects the emotions and thought processes of an employee caused by the tasks assigned to the employee. Job stress can also mean as the emotional and psychological reactions that occur in situations that hinder individual goals and cannot overcome them. Gibson (1996: 344-356) identifies a number of factors that cause job stress, they are: the first is physical working environment, indicated by air pollution, temperature, light, and noisy sounds in the workplace; the second is individual or personal factor, indicated by stress caused by role or position in a company, double or multiple roles, and workload or excessive workload, no control or limit of responsibility, and unfavorable workplace conditions; the third is teamwork, indicated by inharmonious relationships or communication with co-workers, subordinates, or superiors; and the fourth is organization management, indicated by unclear organizational design, uncondusive work climate, and inappropriate policies.

The purpose of this research study was to find out and determine the impact of: (1) Self-Efficacy on Employee Performance, (2) Job Stress on Employee Performance, and (3) Self-Efficacy and Job Stress which might simultaneously influence Employee Performance.

Literature review

Self-Efficacy

Self-efficacy is a person's belief that s/he is able to do something or a particular task. Bandura (cited in Irwansyah, 2013: 116) defines that self-efficacy is a person's consideration of his ability to organize and carry out the actions needed to achieve certain achievements. Self-efficacy is not only a general belief about oneself, but it is also a specific belief that leads to a specific task. Self-efficacy can also be defined as a person's self-confidence about being optimistic in oneself where employees believe that they can perform difficult tasks and achieve the desired results (Mullen cited in Zumeri, 2016: 118). In addition, self-efficacy can also refer to one's self-confidence about his ability to motivate the cognitive resources and actions needed to be successful in carrying out certain tasks (Luthan, 2014: 338).

Riani and Farida (cited in Robi, 2012: 2) state that high self-efficacy could make employees have a will to solve work problems and improve their performances optimally according to the abilities they have. Also, Bandura (cited in Robi, 2012: 2) says that having high self-efficacy could develop a strong personality in a person, reduce job stress, and be stronger for threatening situations. In contrast, individuals with low self-efficacy would tend to be indifferent or be unwilling to cooperate or take part in difficult situations and high-levelled complexity.

Dimensions of Self-Efficacy

Bandura (cited in Handayani, 2013: 13) reveals that self-efficacy consists of three dimensions, namely:

- *Level/magnitude*, the level of dimension relates to the difficulty level of the task where an individual believes that s/he will be able to solve it.
- *Strength*, the dimension of strength relates to the strength of judgments about individual skills. This dimension refers to the degree of stability of an individual towards the beliefs

he makes. This stability determines the individual's resilience and tenacity in having efforts. This dimension refers to an individual's belief in maintaining a certain behavior.

- *Generality*, the dimension of generality is a concept that a person's self-efficacy is not only limited to specific situations. This dimension refers to the variety of situations in which judgments about self-efficacy can be applied.

Work Stress

Stress is an emotional tension or pressure experienced by someone facing enormous demands or the opportunity to carry out an important activity, in which there are obstacles and uncertainties that can affect a person's emotions, thoughts, and physical condition. Robbins (cited in Wahyudi, 2017: 153) states that stress is a dynamic condition of an individual being confronted with an opportunity, constraints, or demand associated with what is highly desired, where the outcome of which is perceived as uncertain. This understanding is based on the fact that a person always strives to advance and excel. Doing efforts to take advantage of opportunities, of course, it cannot be separated from the challenges and obstacles faced.

Stress is the emotional tension or pressure experienced by someone who is facing enormous demands or the opportunity to carry out important activities, in which there are obstacles and uncertainties that can affect a person's emotions, thoughts, and physical condition (Badeni, 2017: 62).

Dimensions of Job Stress

Robbins and Judge (cited in Anang, 2016: 11) say that the dimensions of job or work stress are as follows:

- **Physiological**
The initial symptoms that will appear when someone experiences work stress are usually marked by physiological symptoms. Stress can cause disease in the body which is characterized by changes in body metabolism such as increasing blood pressure, headaches, palpitations, and can also cause heart disease.
- **Psychological**
Stress can cause tension, anxiety, irritability, boredom, procrastination, and others that can cause dissatisfaction with various things, especially in terms of work.
- **Behavior**
Behavioral stressors include changes in productivity, increased absenteeism, and the rate at which employees leave the company. Other impacts are changes in daily habits such as eating disorders, sleep disorders, and also an increase in cigarette and alcohol consumption.

Employee Performance

Work performance is a description of the level of achievement of implementing an activity program or policy in realizing the goals, objectives, vision, and mission of the organization as outlined through strategic planning (Rusdiana, 2015: 192). According to Colquitt (cited in Kasmir, 2016: 183), "Work performance is the value of a set of employee's behaviors that contribute, either positively or negatively to the fulfillment of organizational goals."

Work performance is the result of work and work behavior that has been achieved in completing the tasks and responsibilities given within a certain period. Work performance is a function of motivation and ability to complete a task or job, a person should have a certain level of ability. Gibson (cited in Kasmir, 2015: 182) argues that individual performance is the basis of organizational performance which is strongly influenced by individual characteristics, individual motivation, expectations, and assessments made by management on the achievement of individual work results. Mangkunegara (cited in Masram, 2017: 139) states that "Employee performance is

the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him.”

Dimensions of Work Performance

According to Emron Edison (2017: 193), to achieve or assess work performance, there are dimensions that become benchmarks, namely:

- Target
Target refers an indicator of the fulfillment of the number of goods, jobs or the amount of money generated.
- Quality
Quality is an important factor in work performance because the resulting quality is one of the dimensions that becomes a strength in maintaining customer loyalty.
- Punctuality
Punctuality becomes an important thing because the certainty of distribution is greatly influenced by timeliness which ultimately builds customer trust.
- Obedience to the principles
Obedience to the principles is also an important factor related to the Dimensions of Work Performance since it is an additional factor to meeting targets, quality, and punctuality which must be done in a correct way and be carried out in a transparent and accountable manner.

Based on the literature review discussed above, the author formulates the hypotheses of this research as follows:

1. *Self-efficacy* affects employee performance at PT Sumber Fajar Inti Abadi in Pontianak.
2. *Job stress* affects employee performance at PT Sumber Fajar Inti Abadi in Pontianak.
3. *Self-efficacy* and *Job stress* have a simultaneous effect on employee performance at PT Sumber Fajar Inti Abadi in Pontianak.

Research method

The form of this research study is associative research which aims to find out and determine the relationship between two or more variables. With the help of this research findings, it is hoped to be able to build a theory that serves to explain, predict, and control a symptom. A causal relationship is a cause-and-effect relationship between the (independent) variable and other (dependent) variables (Sugiyono, 2016: 55). The data collecting used for this research study is through questionnaires, that is by distributing questionnaires (questions) to the company employees to support and complete the data collection of this research. Besides, literature study is also used as an additional data collection technique for this research study by studying and searching for the data related to the problems to be discussed in this research study. In this study, bibliographic data were obtained from related theoretical books, national and international journals, previous theses, and previous research findings which were considered relevant and supporting to the research.

The population of this research study were employees who worked at PT Sumber Fajar Inti Abadi in Pontianak with total number of 244 people. The sample of this research study was determined by using the “*slovin*” formula. The author used the “*slovin*” formula in calculating the sample of this research study with an error rate of 10%. The following is the “*slovin*” formula according to Wiratna Sujarweni (2014:16):

$$n = N / (1+N(e)^2)$$

Where:
 n = Number of Samples
 N = The Total Number of Population
 e = Error Tolerance Limit

Based on the explanation above, with the help of the “slovin” formula, the number of samples of this research study can be calculated as follows:

$$n = \frac{N}{1+N(e)^2} = \frac{244}{1+244(10\%)^2} = \frac{244}{3.44} = 70.93 = 71 \text{ people}$$

Therefore, the number of samples for this research study taken from employees of the company PT Sumber Fajar Inti Abadi in Pontianak was 71 respondents. This research was conducted using both qualitative and quantitative research because the data obtained were reported in narrative way and numbers. After collecting the data, then the data were processed using the Statistical Package for the Social Sciences (SPSS) software version 25 for Windows for data analysis.

The data obtained from the respondents were tested first with validity and reliability tests to see if the results were valid and reliable. Then, further testing was carried out with the help of the Statistical Package for the Social Sciences (SPSS) software version 25 to process the data with the method of ‘*Classic Assumption Test*’ to test several things, such as: (1) Normality Test, (2) Multicollinearity Test, (3) Heteroscedasticity Test, and (4) Linearity Test.

After having conducted the ‘*Classical Assumption Test*’, then it was continued with the Hypothesis Testing, they are: (1) Coefficient of Determination testing (R²), (2) Multiple Linear Regression Analysis, (3) F testing, and (4) t testing.

Discussion

In this research study, the *classic assumption testing* was carried out with the help of the Statistical Package for the Social Sciences (SPSS) software version 25 for Windows to process the data. The results of the *classical assumption testing* of this research study are summarized in the following table:

Table 1. **Classical Assumption Testing Results**

Explanation	Test Result	Cut Off	Conclusion
1. Normality <i>Kolmogorov Smirnov (K-S) test method</i>	Asymp. Sig. (2-tailed) 0.070	> 0.05	The distribution of the data is said to be normal because it has met the requirements, that is a significant value of 0.070 is greater than 0.05
2. Multicollinearity Looking at the value of <i>Tolerance</i> and VIF	<i>Tolerance</i> X1 = 0.996 X2 = 0.996 VIF X1 = 1.004 X2 = 1.004	<i>Tolerance</i> > 0.10 VIF < 10	The tolerance value of all variables is more than 0.10 and for the VIF value less than 10.00, it can be said that there is no multicollinearity problem
3. Heteroscedasticity Correlation coefficient method <i>Rank Spearman</i>	The value of Sig. X1 = 0.402 X2 = 0.584	> 0.05	There is no heteroscedasticity problem because the significant value of all variables is more than 0.05
4. Linearity Test	X1 = 0.083 X2 = 0.712	Sig. > 0.05	The independent variable has a very strong relationship, because it has

Explanation	Test Result	Cut Off	Conclusion
Taking into account the value of Sig. <i>Deviation from Linearity</i>			fulfilled the requirements for a significant value of more than 0.05

Source: Processed Data (in 2022)

The following are the results of hypothesis testing conducted by the author:

1. *The coefficient of determination testing (R²)* is the first hypothesis testing conducted to determine the proportion or percentage of the total variation in the dependent variable explained by the independent variable. The coefficient of determination is essentially aimed at measuring how far the model's ability can explain the variation of the dependent variable (Ghozali, 2013: 21). The coefficient of determination testing (R²) results can be seen in Table 2 as follows:

Table 2. Coefficient of Determination Testing

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.775 ^a	0.601	0.575	2.62598	1.898
a. Predictors : (Constant), Work Stress, Self-Efficacy					
b. Dependent Variable: Employee Performance					

Source: Processed Data (in 2022), Output of the SPSS Version 25.0

Based on the data shown in Table 2 above, it can be seen that the value of *R Square* is 0.601. This means that this value indicates that self-efficacy and job stress variables have simultaneous influence of 60.01 percent of the two variables on employee performance, while the rest are influenced by other variables outside of the variables tested in this research which were amounted to 39.99 percent.

2. An analysis on *Multiple-Linear Regression* was conducted to determine the effect of two or more independent variables with one dependent variable displayed in the form of a regression equation (Priyatno, 2011: 238). The following are the results of *Multiple-Linear Regression* testing shown in Table 3 below:

Table 3. Multiple-Linear Regression Analysis Testing

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	13.133	6.197		2.119	0.038
	Self-Efficacy	0.165	0.92	0.202	1.794	0.077
	Work Stress	0.520	0.178	0.329	2.923	0.005
a. Dependent Variable: Employee Performance						

Source: Processed Data (in 2022), Output of the SPSS Version 25.0

From Table 3 above, it can be seen that there is a regression equation found in the research conducted at PT Sumber Fajar Inti Abadi in Pontianak, that is:

$$Y = 0.202 X_1 + 0.329 X_2.$$

Based on Table 3 above, it can also be seen that the variables X_1 and X_2 have a positive effect on variable Y , where the most influential variable is *work stress* (X_2), because the value of *Standardized Coefficients Beta* is greater when compared to the *work stress* variable, where the value obtained is 0.329. Here are the results of the regression equation from Table 3 above:

The regression coefficient on the self-efficacy variable (X_1) is 0.202, which indicates that there is a positive influence between the *self-efficacy* variable on employee performance. In other words, the self-efficacy variable will increase by one unit, that is 0.202 on the employee performance variable. The regression coefficient on the *work stress* variable (X_2) is 0.329, which indicates that there is a positive influence between the independent variable on employee performance, which means that in every increase of one unit, the work stress variable increases by 0.329 on the employee performance variable.

- The F testing was used to determine the effect of all the independent variables (as a whole) and the level of significance depends on the wishes of the author, that is: 0.01 (1 percent), 0.05 (5 percent), and 0.10 (10 percent). This testing was conducted to pay attention to the value of the F testing and its significance, where: if the value of the F testing < 0.05 than the significance value, then the X variable simultaneously affects the Y variable. The statistical F testing basically shows whether all the independent variables included in the model have a joint or simultaneous influence on the dependent variable (Priyatno, 2011: 258). The results of F testing are as follows:

Table 4. F testing

ANOVA ^a						
Model		Sum of Squares	Dr	Mean Square	F	Sig.
1	Regression	184.453	2	92.226	5.560	0.006 ^b
	Residual	1128.026	68	16.589		
	Total	1312.479	70			
a. Dependent Variable: Employee_Performance						
b. Predictors : (Constant), Work Stress, Self-Efficacy						

Source: Processed Data (in 2022), Output of the SPSS Version 25.0

Based on the data shown in Table 4 above, it can be seen that the calculated F value is 5.560, which proves that the value in the calculated F is greater than the value of F in the table, that is: 3.13 ($5.560 > 3.13$). Therefore, it can be concluded that the self-efficacy and work stress variables simultaneously affect the employee performance variable. For further proof, it can be seen at the level of significance, that is: 0.006, which means that it has a significant value which is less than 0.050. So, it can be concluded that the variables of self-efficacy and work stress simultaneously affect employee performance variables at PT Sumber Fajar Inti Abadi in Pontianak.

- The t testing was used to determine whether the independent variable (X) individually affects the dependent variable (Y) partially (Priyatno, 2011: 149). In determining whether an independent variable has an influence on the dependent variable, one way that can be done is to look at the significance value and t arithmetic resulting from the results of the analysis carried out. The criteria required are if the significance value is less than 0.05, t-count is less than t-table, or t-count is greater than t-table, then it can be seen that the independent variable has an influence on the dependent variable.

Table 5. t testing

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	13.133	6.197		2.119	0.038
	Self-Efficacy	0.165	0.092	0.202	1.794	0.077
	Work Stress	0.520	0.178	0.329	2.923	0.005
a. Dependent Variable: Employee Performance						

Source: Processed Data (in 2022), Output of the SPSS Version 25.0

The results of t testing shown in Table 5 above reveal that self-efficacy testing on employee performance can be known from the value of t-count, that is: 1.794 and t-table is 1.995, which means that t-count is smaller than t-table ($1.794 < 1.995$), then it can be concluded that H_0 is accepted and H_a is rejected. The second benchmark can be seen from the value of Sig., which is: 0.077 and the degree of Sig. is 0.05, which means $0.077 > 0.05$, then it can be concluded that H_1 is rejected, which means that the self-efficacy variable has a positive, but not significant, effect on employee performance.

Furthermore, the second hypothesis testing, that is the impact of work stress on employee performance can be known from the value of t-count obtained, that is 2.923 and the t-table is 1.995, which means that the t-count is greater than t-table ($2.923 > 1.995$), then it can be concluded that H_0 is rejected and H_a is accepted. This shows that work stress has a partial effect on employee performance. The value of Sig. is 0.005 and the degree of Sig. is 0.05, which means $0.005 < 0.05$, then H_2 is accepted, so the work stress variable has a partial effect on employee performance.

The relationship between Self-Efficacy variable and Employee Performance

The results of testing conducted on self-efficacy variable, which can be seen from the t-testing, show that the result of t-count is: 1.794 and the result of t-table is: 1.995, which means that t-count is smaller than t-table ($1.794 < 1.995$), therefore H_0 is accepted and H_a is rejected. The second benchmark can be seen from the value of Sig., which is: 0.077 and the degree of Sig. is 0.05, which means $0.077 > 0.05$, then it can be concluded that H_1 is rejected, which means that the self-efficacy variable has a positive, but not significant, effect on employee performance.

The results of this study are not in line with the results of research conducted by Robi Joko Santoso (2012) which proves that the self-efficacy variable has a significant or positive influence on employee performance since the employee's self-confidence in carrying out tasks is high and the attitude in determining goals is more forward-oriented improve the employee performance in determining specific and measurable performance targets. On the other hand, the results of this research, at least, are in line with the results of the research conducted by Dian Rizki Noviwati (2016) which proves that the self-efficacy variable has a positive and insignificant effect on the employee performance variable. So, in conclusion, higher self-efficacy of an employee cannot guarantee that the employee performance will improve as well. The employee performance might increase, but in a low percentage.

The relationship between Work Stress variable and Employee Performance

The results of testing conducted on the work stress variable on employee performance shows that the value of t-count is 2.923 and the t-table is 1.995, which means that t-count is greater than t-table ($2.923 > 1.995$), therefore H_0 is rejected and H_a is accepted. This shows that work stress has a partial effect on employee performance. Value of Sig. is 0.005 and the degree of Sig. is 0.05, which means: $0.005 < 0.05$, therefore H_2 is accepted. In conclusion, the work stress variable has a partial effect on employee performance.

The results of this study are in line with the results of previous research conducted by Tri Wartono (2017) which shows that there is a very strong or positive significant effect of work stress on employee performance due to a decrease in employee performance, caused by excessive stress levels, making the employee to be in a depressed condition. Therefore, it can be concluded that the work stress felt by employees of PT Sumber Fajar Inti Abadi in Pontianak is quite high which causes the decline in employee performance.

The relationship between Self-Efficacy and Job Stress variables on Employee Performance

The test results on the variables of Self Efficacy and Work Stress can be seen in the results of the F testing value, where the value of F-count is 5.560, which proves that the value of F-count is

greater than F-table, that is 3.13 ($5.560 > 3.13$). Therefore, it can be concluded that the self-efficacy variable and work stress variable simultaneously affect employee performance variable. The second proof can be seen from the significance level, that is 0.006, which means that the value of the significance level is less than 0.050. So, it can be said that the variables of self-efficacy and work stress simultaneously affect employee performance variable at PT Sumber Fajar Inti Abadi in Pontianak.

This indicates that the results of this research are in line with the results of research conducted by previous researchers, namely Christina et al., where the results of their research prove that work stress and self-efficacy variables simultaneously affect employee performance at PT Manado Karya Anugrah. This means that the employees at PT Manado Karya Anugrah have sufficient work stress and have high self-efficacy that make them able to optimize their performances.

Conclusion and Suggestion

Conclusion

Based on the research findings and discussion, the following conclusions are obtained:

1. The results of the three-hypothesis testing show that self-efficacy has a positive, but not significant, effect on employee performance at PT Sumber Fajar Inti Abadi in Pontianak. Also, work stress has a positive and significant effect on employee performance at PT Sumber Fajar Inti Abadi in Pontianak. From the results of the simultaneous test that has been carried out on the third hypothesis testing, it shows that work stress and self-efficacy simultaneously have a positive effect on employee performance at PT Sumber Fajar Inti Abadi in Pontianak.
2. Based on the results of the hypothesis testing, it can be concluded that self-efficacy variable itself is not enough to increase the performance of employees of PT Sumber Fajar Inti Abadi in Pontianak, but there must be a sufficient influence of work stress in order that the performance of employees of PT Sumber Fajar Inti Abadi in Pontianak can increase.

Suggestion

Based on the results of data analysis, discussion, and conclusions above, the author provides suggestions to following parties:

1. Company

The management of PT Sumber Fajar Inti Abadi in Pontianak are suggested to improve their employees' performances by increasing the self-efficacy of their employees by doing significant efforts. For example, leaders should give more attention to their employees by providing trainings on increasing self-confidence in employees which can help the employees develop themselves and improve their abilities. These kinds of trainings can be given on an ongoing or continuous basis with the consideration that if the employees have low self-efficacy, their performances will also decrease.

2. Readers and future Researchers

The readers of the research and future researchers may use the results of this research study as an illustration and insight into the reader's knowledge about the effect of self-efficacy and work stress on employee performance. Anyone interested in doing research with the same theme can make the results of this research as the first step in conducting further research since there are still 39.99% of other factors besides self-efficacy and work stress variables that have not been revealed in this study, such as work motivation, work discipline, multiple-role conflicts, and others. By having other additional variables, it may help future and further researchers understand or find out the relationship between self-efficacy and work stress variables more deeply.

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Measuring Market Structure In The Halal Food Industry: Empirical Evidence From The Bangka Belitung Islands

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Abstract : The halal food industry in the Province of Bangka Belitung Island which located in Indonesia has enormous potential. It is because this area has huge tourism potential and natural resources. The existence of price changes is always fluctuating, so it will affect the market structure. This study aims to determine the market structure of the halal food industry in the Province of the Bangka Belitung Island. The data were obtained from 173 halal food industry companies. Data collection was the daily data from the company's buying and selling activities. Then, the data had been analyzed quantitatively. The analysis data were based on the market concentration (CR), HHI (Herfindal-Hirschman Index), and Minimum Efficiency Scale (MES). The results showed that the market concentration ratio was 15,95 persen CR4 and 29,93 persen CR8. Moreover, the HHI value was 1.826 and the MES value was 4.15 persen. These data indicated that the market structure of the halal food industry in the province of Bangka Belitung Island is an oligopoly with very low competitive competition. The results of this study are expected to be a reference in determining behaviour and policies.

Keywords: Halal Food Industry, Bangka Belitung, Market Structure.

Introduction

Indonesia, which was previously ranked 10th in the world and is now placed fifth, increased its ranking score in 2019, according to data published by the Global Islamic Economy (Hardiwinoto et al., 2021). With a value of \$173 trillion, Indonesia held the top spot as the nation with the world's greatest consumer market share in 2018 (Lee and Syah, 2018). Indonesia is currently ranked sixth in the world for Muslim-friendly tourism, with an estimated value of US\$11.2 billion. With a global consumption of 16 billion US dollars, Indonesia ranks third among consumers of Muslim fashion. The halal pharmaceutical and cosmetics industries in Indonesia are ranked 6th and 2nd, respectively, with total expenditures of US\$5.4 billion and US\$4 billion (Wibowo and Manelsi, 2022). The Organization of the Islamic Conference (OIC) member countries and 16 non-OIC nations made up the 76 countries that participated in the survey, which revealed that the financial industry and halal food have bigger contributions than other sectors. The halal food market, which might generate up to \$1.9 trillion in revenue by 2021, is a significant worry for businesses in several nations, including Indonesia (Muhajir and Al Hasan, 2021).

The market share of the halal sector to GDP increased from 24.3 percent in 2016 to 24.86 percent in 2020, indicating an enhanced contribution of the halal industry to Indonesia's national economy (Rahayu and Ningtyas, 2021). Through Minister of Finance Regulation No. 57 2021 concerning Service Tariffs for the Public Service Agency for the Halal Product Guarantee Agency at the Ministry of Religion, the Indonesian government put into place a halal certification program to assist the halal business. Additionally, the government has started a scheme to exempt MSMEs from paying the fees associated with halal certification (Abdurrahman Konoras, 2021). In addition to Micro, Small, and Medium-Sized Enterprises (MSMEs), places with natural resources and a tourism industry can begin developing halal products (Khan and Callanan, 2017). In Indonesia, the Province of the Bangka Belitung Islands is a region with a lot of potential for tourism and

natural resources. By 2022, 2,224 food businesses will be halal-certified in the Province of the Bangka Belitung Islands (Babel, 2022). The majority of these businesses deal with the processing of marine materials.

Companies in this business must be able to compete both with existing competitors and with future newcomers to the industrial market in order to thrive. Additionally, businesses in the area must be able to compete with the abundance of foreign food and drink items that are available in Bangka Belitung. Competition among businesses in a sector will have an impact on market share expansion, which will eventually lead to a high degree of concentration. High concentrations seem to have the ability to trigger a range of unfair business competition behaviors from the perspective of market structure. The empirical research on this topic is also discussed, and worries about growing market power and concentration can be found in a number of studies, including Fitriani et al. (2014), Chalil and Ahmadi-Esfahani (2005), Setiawan et al. (2012), Taridala et al. (2021), Naylah & Nurfadillah (2021), and Wardhono et al. (2020). Researchers that have looked into the competitiveness of the Indonesian food market prefer to focus on oligopolies. However, there hasn't been any investigation into the market dominance of oligopolies in Indonesia's halal food and food sector.

Literature Review

According to the framework for the relationship between structure, conduct, and performance, it is stated that an industry's structure will have an impact on its conduct, which will then have an impact on its performance. Market concentration, economies of scale, product differentiation, capital intensity, export share (relationship of export value to total output), and import share are the factors that influence the market structure of an industry (ratio of import value to total output) (LeLissa and Kuhil, 2018). While price tactics, product strategies, and promotion methods can be used as indications of industrial behavior. Productivity, efficiency, profit, and price are some examples of industry performance metrics. The market structure describes market conditions that govern factors such as the number of sellers and buyers, obstacles to entry or exit from the market, product differentiation, distribution channels, and market dominance (Ren et al., 2019). These factors have a significant impact on business behavior and market performance.

Many studies have applied the SCP paradigm to competition in the halal industry, but it has only been used in the Islamic finance sector. Ab-Hamid et al. (2018) examined the market structure of the Islamic banking industry in Malaysia during 2001-2005 and evaluated the level of market competition. The results show that Islamic banks in Malaysia earn their income under conditions of monopolistic competition. In Indonesia, research conducted by Abduh (2017), Malini and Putri (2020), and Risfandy et al. (2019) found that the Islamic finance industry earned its income under monopolistic competition during the tested period. In other words, these results confirm the situation of this industry operating at a higher level of market power leading to a less competitive market.

Research on competition in the halal industry conducted in the Islamic finance sector mostly concentrates on the monopolistic competition. In contrast to research conducted on the food industry in Indonesia, it tends to concentrate on oligopoly. As done by Chalil et al., (2006) who conducted research on market power in the palm oil industry, then Fitriani et al., (2014) who examined the broiler industry, Setiawan et al., (2011) researched food and beverages industry, Taridala et al., (2020) who researched the market structure of abalone (a type of shellfish), then Naylah et al., (2021) who researched the rice market structure, Wardhono et al., (2020) researched the chili market. No research uses this theory in the halal food industry.

Methods

The data collected is primary data collected using interviews that have been prepared by questionnaires/lists of research questions. The data was taken from 173 respondents who are halal-certified food producers in the Bangka Belitung Islands. The data collected is daily data on buying

and selling activities for one month. To measure the market structure, the concentration ratio (CR) is used, which is the proportion of total sales in the market recorded by the sellers of the largest companies. CR can be found using the following formula (Abduh, 2017):

$$CR_x = \frac{S_1 + S_2 + \dots + S_x}{S_T}$$

Information:

S_x = The x-biggest sale

S_T = Total sales

CR_x = Market concentration level

According to Baye, (2010), market concentration can be measured by the four largest companies in an industry. In addition, to measure the market structure, also using measurements with HHI (Herfindahl-Hirschman Index), to determine the degree of concentration of sales with an interval of values between 0 to 1 or Baye's version of HHI (2010) the HHI index value is between 0 to 10,000.

$$HHI = \sum W_i^2$$

Where w is the market share obtained from the sales volume of one producer divided by the total sales volume of all traders in the market. Meanwhile, to measure barriers to market entry, the equation used is the average industrial output of companies that produce industrial output Malini and Putri (2020).

$$MES = \frac{\text{Output perusahaan terbesar}}{\text{Output Industri}}$$

Economies of scale limit the number of activities that can be performed at minimum cost in a market of known size. The measuring instrument commonly used to determine the size of the barrier to entry is the Minimum Economies of Scale (MES).

Findings

The market structure analyzed in this study is based on market concentration. Market concentration is analyzed using CRX (concentration ratio). In analyzing CRX, it is necessary to first know the market share controlled by producers in the halal food industry in Bangka Belitung. The amount of market share controlled by producers is based on the contribution of producers to the average sales volume of halal food each month to the total sales volume of all producers. The CRX analysis carried out in this study is more emphasized on the description of market share by 4 (four) and 8 (eight) producers with the largest market share.

Table 1 Sales Volume and Market Share of the 4 and 8 Largest Companies

Company name	Sale Volume	Market Share	Market Share (%)
Roda Mutiara	77.000.000	0.041580491	4,15
Getas ZMC	75.900.000	0.040986484	4,09
Alent	75.000.000	0.040500478	4,05
Mandiri Usaha Bersama	67.425.000	0.03640993	3,64
Kuda laut	67.100.000	0.036234428	3,62
Tiga Roda	66.000.000	0.035640421	3,56
Getas Cap Piala	63.250.000	0.034155403	3,42
Sehati Duo Ayu	62.500.000	0.033750398	3,38
CR ₄		0,1595	15,95*
CR ₈		0,2993	29,93*
HHI		0.01826	1.826**
MES		0.0415	4,15*

*Persen ** Nominal

Source: Processed, 2022.

So, based on the calculation results show the CR4 value is 15.95 percent, meaning that the market structure of the halal food industry in Bangka Belitung is small concentrated. This means that 4 (four) producers do not completely control the sales proceeds in the Bangka Belitung halal food industry. Likewise, when a CRX analysis was carried out on market control by 8 (eight) producers with the largest market share (CR8), it showed a value of 29.93 percent which indicated the market structure of the halal food industry in Bangka Belitung was small concentrated. According to Baye (2010), if the concentration ratio is close to 1 (one), it indicates that the market is concentrated and there is little competition between traders. In addition to being measured by CRX, measurements were made with HHI (The Herfindahl-Hirschman Index). HHI analysis is done to know the degree of concentration of sales. The HHI value interval is between 0 to 1. The closer to 0 (zero), the market structure formed is closer to perfect competition. Meanwhile, if the HHI value is close to 1 (one) then the market structure formed is close to a monopoly, however, if the HHI value is between 0-1 then the market is approaching an oligopoly market. Likewise, Baye (2010) states that if the HHI value ranges from 0 to 10,000. multiply by 10,000 to eliminate the decimals resulting from squaring market share. If the HHI value is 0 (zero) some traders have a very small market share (it can be said as a perfectly competitive market). Meanwhile, if the HHI value is 10,000, then there is 1 (one) trader whose market share is worth 1 (in other words, it is a monopoly market). In contrast to the classification issued by the US-Federal Trade Commission, if the HHI value <1,000 is classified as low concentrated, 1,000-1,800 is classified as moderately concentrated, and >1,800 is classified as highly concentrated.

The results of the HHI calculation at the level of producers of the halal food industry in Bangka Belitung have a value of 0.01826. Based on the calculation results, the HHI value obtained at the producer level of the halal food industry in Bangka Belitung is a market with an oligopoly structure with small strength. Meanwhile, if Baye uses the HHI value, the HHI value is 1,826 which indicates that the market structure consists of small producers. And if you refer to the classification of the US Federal Trade Commission, it is classified as a moderately concentrated market.

Based on the results of CRX and HHI calculations, it can be stated that the strength of the oligopoly in the Bangka Belitung halal food industry is an oligopoly with a moderate concentration. This is following Sys (2009) detailing that if the CR4 is less than 60 percent, it is classified as a loose oligopoly. Meanwhile, Kohls and Uhl (2002) stated that if the CR4 of the largest company is more than 50 percent, then the market structure tends to approach oligopoly. Apart from measuring CRx and HHI, oligopoly strength can also be seen from the entry barrier. The indicator of barriers to entry into a market is the Minimum Efficiency Scale (MES). MES is calculated from the largest company's output/total output of the industry. Output in the halal food industry is measured by sales volume. The entry barrier for the halal food industry in Bangka Belitung is quite low. This can be seen from the Minimum Efficiency Scale value in the halal food industry which is less than 10 percent, even reaching 4.15 percent (Table 1). According to Alistair, an MES of less than 10 percent represents a low barrier to entry in an industry, we're on a large economy of scale it is not difficult for new companies to enter the industry. However, this indicates that new business actors can easily enter the halal food industry market in Bangka Belitung when the economies of scale are low. Low barriers to market entry indicate that the halal food industry in Bangka Belitung has low oligopoly power.

In an oligopoly market, there is interdependence and mutual influence between a producer of the halal food industry and other competitors. In an oligopoly market, collusion between producers is very possible. If this happens, then the party who will be harmed is the consumer. For example, these producers may collude to charge high prices for their products. There is a positive relationship between market concentration/market share and the level of profit with moderate barriers to entry. For entry barriers that are high enough, the concentration of the company will create extra profits for the company. However, because in this industry the barriers to market entry tend to be small, the company must make high sales to get big profits. In addition,

if you have entered the oligopoly market, the marketing strategy used must be mature. In the halal food industry in Bangka Belitung, the variety of products available is not much, so the competition will be much tougher. By doing promotions and marketing should be done as often as possible so that consumers do not switch to other products. Then the Bangka Belitung government is expected to be able to take policies in maintaining oligopoly market conditions so that they remain low concentrated. Policy recommendations that can be taken by the Bangka Belitung government are:

1. Provide convenience for new companies that will enter the market and still maintain competition. In this case, the Bangka Belitung government can make it easier for new business actors to get halal certification.
2. Enact the anti-cooperation law between producers, namely with the enactment of the anti-monopoly Law No. 5 of 1999.
3. To supervise business competition in Indonesia, the government has established an independent body, namely the Business Competition Supervisory Commission, which is abbreviated as KPPU. With the existence of the KPPU, it is hoped that the negative impact of oligopoly in the halal food industry in Bangka Belitung can be avoided.

Conclusion

The market structure of the halal food industry in Bangka Belitung, which is dominated by the four largest business actors and the eight largest business actors, is an oligopoly with a small concentration with a CR4 of 15.95 percent and a CR8 of 29.93 percent. Likewise, the HHI value of 0.1826 (1.826) indicates the structure formed leads to an oligopoly market. Then with a Minimum Efficiency Scale (MES) value of 4.15 percent, which indicates that the entry barrier to the halal food industry market in Bangka Belitung is relatively low.

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Bank's Perspective on Elements of Environmental and Social Safeguard for Mini Hydro Powerplant Project Due Diligence in Indonesia

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Abstract: The increasing trend of bank to prioritize environmental and social aspects. However, it must be followed by better project preparation and the independent power producer (IPP) must pay attention for those aspects. The research will provide input to the IPP with regard the environmental and social safeguard elements. The important things that to be considered by bank when conducting environmental social safeguard due diligence (ESDD) to Mini Hydro Power Plant (MHPP) in Indonesia. The elements to be assessed along with the weight of the assessment are determined by using the Fuzzy Analytical Hierarchy Process Method (FAHP). There were seventeen respondents with a banking background involved in the interview and questionnaire process. The results of the FAHP method shows that externalities cost, for example, "the variable has the highest weight, followed by the support from the affected community and surrounding the project". Finally, by understanding that environmental and social elements are considered important variables by bank, IPP can prepare the project better to make easier to obtain loans from the bank.

Keywords: due diligence, environmental, ESDD, Fuzzy-AHP, mini hydro, power plant, social

Introduction

The risks related to the environmental and social safeguard aspects of minihydro power plant (MHPP) are different from other power plants. Therefore, it is necessary to identify the environmental and social risks in a MHPP. The identification is through environmental and social safeguard due diligence (ESDD).

Literature Review

The involvement of the private sector in managing environmental and social risks in Indonesia is regulated in Law Number 32 of 2009 concerning environmental protection and management which among other things regulates the obligation for industry to protect nature and the environment. Environmental and Social Aspects become very important when associated with the issue of "sustainability". Sustainable development is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their needs. (USAID & OJK, 2016)

(Regulation of Minister of Environment and Forestry Republic of Indonesia Number 4 of 2021 Concerning List of Businesses and/or Activities Must Have an Analysis of Environmental Impacts, Environmental Management Effort and Environmental Monitoring Effort or Statement of Ability for Environmental Management and Monitoring, 2021) requires the hydropower plants with a capacity more than 50 MW (fifty megawatts) has to have an analysis of environmental impacts (AMDAL). It means, the run-off river hydropower plant or MHPP with a capacity up to 10 MW (10 megawatts) just need environmental management effort and environmental monitoring effort (UKL-UPL) only.

Environmental and social safeguard due diligence (ESDD) will identify the impacts and the risks as early as possible in carrying out environmental management functions and provide technical recommendations related to the project. Usually, the ESDD will be carried out by considering to the arrangement of the environment and social standard (ESS) elements based on the AMDAL/UKL-UPL review, related permits, results of site visit, interviews and discussions with IPP as well as other documents. Furthermore, if there is a gap between the AMDAL/UKL-UPL and the ESS elements, a corrective action plan (CAP) has to be submitted. Some financial institution or bank have ESS elements which may be different each other but actually have the same scope.

The concern of bank to finance projects with giving more attention to environmental and social issues in Indonesia has become increasingly prominent in recent years. Starting with the establishment of the Indonesian Sustainable Finance Initiative (IKBI) in 2018 and it is also listed in the Financial Services Authority's Phase II Sustainable Finance Roadmap. (OJK, 2021)

Table.1 represents 12 (twelve) ESS variables/elements that will be used as questionnaire material which be obtained from discussion with 2 experts who have backgrounds and specializations in the environmental and social sector, as well as considering the ESS elements of IFC (IFC, 2013), World bank (The World Bank, 2017) and KfW (KfW Development Bank, 2019).

Table 1 : ESS elements in this research

Related ESS Elements of IFC, The WorldBank and KfW			ESS elements in this research	
IFC	WB	KfW		
No of ESS				
6,7	6,7	6,7	ESS1	Existence of critical habitats surrounding the project.
6	6	6	ESS2	River ecological conditions.
1,3,4	1,3,4	1,3,4	ESS3	Waste management during construction and operation stage.
1,2,4	1,2,4	1,2,4	ESS4	The increasing in economic activity surrounding the project.
1,2	1,2,9	1,2,9	ESS5	Jobs opportunities for affected communities and surrounding the project.

8	8	8	ESS6	The procedures for the protection of conservation resources.
5	5	5	ESS7	A land acquisition process that does not harm the affected communities and surrounding the project.
5	5	5	ESS8	The process of resettlement that can improve the welfare of the displaced population.
	10	10	ESS9	Socialization about the project to affected people and residents surrounding the project.
8	8	8	ESS10	The project must respect the traditions of the community surrounding the project.
1	1	1	ESS11	The support from the affected community and surrounding the project.
1,4	1,4	1,4	ESS12	Availability of externality cost (cost for environmental management including corporate social responsibility – CSR).

Method, Data and Analysis

Method

The initial stage of the research is to conduct interviews with the experts related to the ESS elements of IFC, The World Bank and KfW and adapt them to the real conditions in the MHPP Project in Indonesia. Based on the interview, we obtained 12 elements of ESS which will be tested on the Respondents. The results of the questionnaire were processed using the Fuzzy Analytical Hierarchy Process (FAHP) method with the help of Microsoft Excel 2026 Software to obtain the weighting of each ESS element. (Stević et al., 2017) (Setiono et al., 2020) (Kaganski et al., 2018)

Data

The ESS elements obtained as shown in Table 1 were tested on 20 respondents with a banking background and had previously been involved in financing the MHPP project.

Analysis

The results of the questionnaire were processed using the FAHP method. Starting with the preparation of the pairwise comparison matrix, calculating the priority vector, calculating the consistency ratio and compiling the weighting.

Finding

A paired matrix of results from the questionnaire

The data obtained from the questionnaire results are arranged in a paired matrix after previously calculating the geometric mean (geomean) first, because of it uses many respondents. This process to eliminate deviations that may occur from the data from the respondents' assessment results. Table. 2 shows the paired matrix according to geometric mean calculations.

Table 2 : Paired matrice according to geometric mean calculations

	ESS1	ESS2	ESS3	ESS4	ESS5	ESS6	ESS7	ESS8	ESS9	ESS10	ESS11	ESS12
ESS1	1	5/8	1	6/7	1	3/4	2/3	3/4	2/3	3/4	2/3	3/5
ESS2	1 3/5	1	7/8	6/7	4/5	4/5	5/6	6/7	8/9	1	3/4	3/5
ESS3	1	1 1/7	1	1	1	1	7/8	4/5	2/3	6/7	2/3	4/9
ESS4	1 1/6	1 1/6	1 1/9	1	5/7	3/4	2/3	2/3	2/3	3/4	3/5	2/5
ESS5	1	1 1/4	1	1 2/5	1	5/7	5/9	3/5	5/9	5/8	1/2	2/5
ESS6	1 1/3	1 1/4	1	1 1/3	1 2/5	1	5/8	2/3	2/3	3/4	3/5	1/2
ESS7	1 1/2	1 1/5	1 1/7	1 4/7	1 7/9	1 3/5	1	1	5/6	7/9	4/5	5/8
ESS8	1 1/3	1 1/6	1 1/4	1 4/9	1 2/3	1 4/9	1	1	2/3	2/3	2/3	1/2
ESS9	1 1/2	1 1/8	1 3/7	1 1/2	1 4/5	1 1/2	1 2/9	1 1/2	1	6/7	5/7	5/9
ESS10	1 1/3	1 1/9	1 1/6	1 1/3	1 5/8	1 1/3	1 2/7	1 1/2	1 1/6	1	3/4	1/2
ESS11	1 1/2	1 1/3	1 1/2	1 2/3	2	1 5/8	1 1/4	1 1/2	1 2/5	1 1/3	1	2/3
ESS12	1 2/3	1 2/3	2 1/4	2 1/2	2 1/2	2 1/5	1 3/5	2	1 4/5	2	1 4/7	1
Total	16	14	14 5/7	16 4/9	17 1/7	14 2/3	11 3/5	12 5/6	11	11 1/3	9 2/7	6 2/3

Cosistency ratio

Table.2. represents the priority vector and eigen value which be calculated from the data at the initial stage.

Table 3 : Priority vector

	ESS1	ESS2	ESS3	ESS4	ESS5	ESS6	ESS7	ESS8	ESS9	ESS10	ESS11	ESS12	eigen vector
ESS1	0.062	0.045	0.062	0.052	0.055	0.052	0.059	0.058	0.062	0.066	0.070	0.088	0.061
ESS2	0.099	0.071	0.059	0.053	0.046	0.055	0.072	0.067	0.081	0.080	0.082	0.088	0.071
ESS3	0.068	0.082	0.068	0.055	0.056	0.065	0.075	0.061	0.063	0.076	0.073	0.066	0.067
ESS4	0.073	0.082	0.075	0.061	0.041	0.050	0.055	0.054	0.060	0.065	0.064	0.060	0.062
ESS5	0.066	0.090	0.070	0.086	0.058	0.049	0.048	0.047	0.051	0.055	0.054	0.060	0.061
ESS6	0.081	0.088	0.072	0.083	0.082	0.068	0.054	0.054	0.060	0.067	0.066	0.068	0.070
ESS7	0.092	0.086	0.078	0.096	0.104	0.109	0.086	0.075	0.075	0.069	0.086	0.094	0.087
ESS8	0.083	0.082	0.086	0.088	0.097	0.099	0.090	0.078	0.062	0.060	0.071	0.073	0.081
ESS9	0.092	0.080	0.098	0.092	0.105	0.103	0.105	0.115	0.091	0.076	0.077	0.083	0.093
ESS10	0.083	0.078	0.079	0.083	0.094	0.090	0.111	0.115	0.105	0.088	0.080	0.073	0.090
ESS11	0.095	0.094	0.100	0.103	0.117	0.112	0.108	0.118	0.127	0.118	0.108	0.095	0.108
ESS12	0.106	0.121	0.153	0.150	0.144	0.149	0.137	0.159	0.164	0.180	0.169	0.149	0.148
Jumlah	0.062	0.045	0.062	0.052	0.055	0.052	0.059	0.058	0.062	0.066	0.070	0.088	1.000

Furthermore, to get the eigen value, the pairwise comparison matrix is multiplied with the eigen vector.

$$\begin{bmatrix} 0.062 \\ 0.099 \\ 0.068 \\ 0.073 \\ 0.066 \\ 0.081 \\ 0.092 \\ 0.083 \\ 0.092 \\ 0.083 \\ 0.095 \\ 0.106 \end{bmatrix} \times \begin{bmatrix} 0.045 & 0.062 & 0.052 & 0.055 & 0.052 & 0.059 & 0.058 & 0.062 & 0.066 & 0.070 & 0.088 & 0.061 & 0.0739 \\ 0.071 & 0.059 & 0.053 & 0.046 & 0.055 & 0.072 & 0.067 & 0.081 & 0.080 & 0.082 & 0.088 & 0.071 & 0.8601 \\ 0.082 & 0.068 & 0.055 & 0.056 & 0.065 & 0.075 & 0.061 & 0.063 & 0.076 & 0.073 & 0.066 & 0.067 & 0.8181 \\ 0.082 & 0.075 & 0.061 & 0.041 & 0.050 & 0.055 & 0.054 & 0.060 & 0.065 & 0.064 & 0.060 & 0.062 & 0.7481 \\ 0.090 & 0.070 & 0.086 & 0.058 & 0.049 & 0.048 & 0.047 & 0.051 & 0.055 & 0.054 & 0.060 & 0.061 & 0.7421 \\ 0.088 & 0.072 & 0.083 & 0.082 & 0.068 & 0.054 & 0.054 & 0.060 & 0.067 & 0.066 & 0.068 & 0.070 & 0.8531 \\ 0.086 & 0.078 & 0.096 & 0.104 & 0.109 & 0.086 & 0.075 & 0.075 & 0.069 & 0.086 & 0.094 & 0.087 & 1.0621 \\ 0.082 & 0.086 & 0.088 & 0.097 & 0.099 & 0.090 & 0.078 & 0.062 & 0.060 & 0.071 & 0.073 & 0.081 & 1.09821 \\ 0.080 & 0.098 & 0.092 & 0.105 & 0.103 & 0.105 & 0.115 & 0.091 & 0.076 & 0.077 & 0.083 & 0.093 & 1.1311 \\ 0.078 & 0.079 & 0.083 & 0.094 & 0.090 & 0.111 & 0.115 & 0.105 & 0.088 & 0.080 & 0.073 & 0.090 & 1.0961 \\ 0.094 & 0.100 & 0.103 & 0.117 & 0.112 & 0.108 & 0.118 & 0.127 & 0.118 & 0.108 & 0.095 & 0.108 & 1.3131 \\ 0.121 & 0.153 & 0.150 & 0.144 & 0.149 & 0.137 & 0.159 & 0.164 & 0.180 & 0.169 & 0.149 & 0.148 & 1.8051 \end{bmatrix}$$

After obtaining the eigen value, the maximum eigen (λ_{max}) is calculated which is the average of the results of the division between eigen value divided by each eigen vector value.

$$\lambda \max = 12.15$$

Based on the random consistency index table, for the number of matrix (n) = 12 , then the random consistency index (RI) value is 1.48. Consistency index value is obtained at 0.013.

$$\text{Consistency ratio (CR)} = 0.01$$

The comparison matrix (Table 2) is declared “Consistent” due to $CR \leq 0.10$.

Conversing to triangular fuzzy number (TFN)

Table 4 represents the linguistic assessment of the respondents was changed to TFN according to the comparison

Table 4 : Triangular fuzzy number scale

AHP scale	Definition	Scale TFN (l,m,u)	Invers
1	Both variables are equally important	(1,1,1)	(1,1,1)
2	The scale between the same and slightly more important	(1,2,3)	(1/3,1/2,1/3)
3	One variable is slightly more important than the other variables	(2,3,4)	(1/4,1/3,1/2)
4	Scale between slightly more important and more important	(3,4,5)	(1/5,1/4,1/3)
5	One variable is more important than the other variables	(4,5,6)	(1/6,1/5,1/4)
6	The scale between more important and very more important	(5,6,7)	(1/7,1/6,1/5)
7	One variable is more important than the other variables	(6,7,8)	(1/8,1/7,1/6)
8	The scale between very more important and absolutely more important	(7,8,9)	(1/9,1/8,1/7)
9	One variable is more important than the other variables	(8,9,9)	(1/9,1/9,1/9)

Fuzzy weight calculation

In this study, the geometric mean will be used to calculate the fuzzy weight of each ESS variable. (Buckley, 1985)

$$\tilde{A}_1 \otimes \tilde{A}_2 = (l_1, m_1, u_1) \otimes (l_2, m_2, u_2) = (l_1 * l_2, m_1 * m_2, u_1 * u_2) \dots \dots \dots (1)$$

Table 5 show the fuzzy geometric value (l,m,u) for each elements.

Table 5 : Fuzzy geometric value

Fuzzy gometric mean value			
	l	m	u
ESS1	0.7102	0.756	0.8232
ESS2	0.8064	0.873	0.95
ESS3	0.7788	0.843	0.9325
ESS4	0.6986	0.7649	0.8499
ESS5	0.6885	0.7529	0.8419
ESS6	0.787	0.8735	0.9604
ESS7	0.9888	1.09	1.1943
ESS8	0.9045	1.0056	1.122
ESS9	1.0454	1.1611	1.2697
ESS10	1.0171	1.122	1.2306
ESS11	1.206	1.352	1.487
ESS12	1.576	1.850	2.095
Total	11.208	12.445	13.756
Reverse (r)	0.089	0.080	0.073
Increasing order	0.073	0.080	0.089

Fuzzy Weight is obtained from the multiplication of each Fuzzy Geometric Mean Value with Increasing order. While the Weight is the average of the Fuzzy Weight Value. To get a weighting that has a total percentage of 100%, a normalization process is carried out by dividing the Weight by the number of ESS variables. Table 6 represents the fuzzy weight, weight and normalized weight which be obtained from calculation.

Table 6 : Fuzzy weight, weight dan normalized weight

	Fuzzy weight			Weight	Normalized weight	
	l	m	u			
ESS1	0.051	0.061	0.073	0.062	0.061	6.11%
ESS2	0.059	0.070	0.085	0.071	0.070	7.02%
ESS3	0.057	0.068	0.083	0.069	0.068	6.82%
ESS4	0.051	0.061	0.076	0.063	0.062	6.18%
ESS5	0.050	0.060	0.075	0.062	0.061	6.10%
ESS6	0.057	0.070	0.086	0.071	0.070	7.00%
ESS7	0.072	0.088	0.107	0.089	0.087	8.74%
ESS8	0.066	0.081	0.100	0.082	0.081	8.11%
ESS9	0.076	0.093	0.113	0.094	0.093	9.29%
ESS10	0.074	0.090	0.110	0.091	0.090	9.00%
ESS11	0.088	0.109	0.133	0.110	0.108	10.81%
ESS12	0.115	0.149	0.187	0.150	0.148	14.80%
Total				1.014	1.000	100%

Finding

Based on data processing using the FAHP method, we obtain that ESS12 (availability of externalities cost) is the variable which has the greatest weight and attention from respondents who have a financial institution background. The next ESS that received the greatest weight and attention is ESS11 (the support from the affected community and surrounding the project).accomodate social issues (mostly land acquisition related, including but not limited to customary land) in order to get support from the community surrounding the project.

Discussion

It needs to be discussed whether the externality cost is really needed by the IPP to get support from the community. The table 3 below is taken as a sample of MHPP in relation to the existence of externality costs in the project. There is the externality cost to be paid due to accomodate social issues (mostly land acquisition related, including but not limited to customary land) in order to get support from the community surrounding the project.

MHPP#1 and MHPP#2 are located in South Pesisir Regency and West Pasaman Regency, respectively. Customary law is highly respected in West Sumatra Province. Especially with regard to customary land. (West Sumatra Provincial Regulation Number 6 of 2008 Concerning Communal Land and Its Utilization, 2008) direction that the utilization of ulayat land for the benefit of legal entities and or individuals can be carried out based on an agreement on the exploitation and management of communal/ulayat land between the owner/holder/controller of ulayat land. an agreement between indigenous peoples, legal entities and or individuals within a certain period of time in the form of equity participation, profit sharing and or other agreed forms.

MHPP#1 underwent a long procurement process and had to involve the tribes who own the communal land. IPP has paid for the purchase of land according to its needs. For the need for access roads during the construction process, IPP initially planned to only lease the land. However, IPP decided to purchase the land to secure the access road during the construction process. IPP also had to move the location of its powerhouse because there was a grave of a resident in that location and the family was not willing to move the tomb.

MHPP#2, which is located in West Pasaman Regency, was forced to move the project access road because land acquisition land proposal was rejected by the local community. The process of land acquisition for the transmission line also encountered obstacles from the community who did not want their land to be acquired (especially for right of way and placement of transmission poles). This refusal forced IPP to redesign it using an underground conductor system. IPP also asked to repair roads damaged by the earthquake that occurred at the project site through its corporate social responsibility (CSR) program.

The third example is MHPP#3 which is located in Kaur Regency, Bengkulu Province. Most of the land for the MHPP #2 project is in the Protected Forest Area. The local community asked IPP to change the route of the access road in the hope of using the new project access road to get to their land. The access road is getting longer, but the community also enjoys these facilities. The local community also asked IPP to build a new mosque.

MHPP#4 is located in North Toraja, South Sulawesi. The project location is in the cultural heritage area of the Toraja Tribe, where there are many traditional tongkongan houses and also traditional tombs. The community wants to move the location of the weir because there are sacred stones and trees. This relocation causes design changes and additional land acquisition. The relocation and redesign of the weir resulted in an additional project cost of 44 billion rupiah.

Table 7 : Externality cost in the sample projects

MHPP	Capacity	Location	Initial project cost (FS) in mio IDR	Actual project cost in mio IDR	Description
MHPP #1	2 x 3 MW	Pesisir Selatan, West Sumatera	171.6	206.0	Additional land acquisition for powerhouse due to there is a tomb in the previous location and the project access road.
MHPP #2	2 x 3 MW	West Pasaman, West Sumatera	190	194	Additional land acquisition for construction acces road, redesign of transmission lines (to be underground cable), relocate the mushala, and CSR for village road rehabilitation due to earthquake.
MHPP #3	2 x 3,5 MW	Kaur, Bengkulu	197.0	205.7	Additional land acquisition for access road according to agreement with community.
MHPP #4	2 x 4 MW	North Toraja Utara, South Sulawesi	201.1	245.3	Addition land acquisition and change of weir design according to agreement with community and to suit customary land.

Conclusion

The result of the research shows that externality costs and support from the community surrounding the project are the most important aspects considered by the bank when decided to finance the MHPP project in Indonesia. The sample data also shows that there are significant

additional costs to be provided by IPP to accommodate the wishes of the community surrounding the project. This is to get support from the community. The amount of the externality cost is varied, subject to the location and complexity of the social issue.

An overview of the environmental and social elements that are considered important by banks will help IPP to prepare the project better, thus making it easier to obtain loans in the development of the MHPP. Next comprehensive research is needed by conducting environmental and social safeguards using ESS elements as the results of this research.

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CAPITAL STRUCTURE AS A MODERATING VARIABLE BETWEEN PROFITABILITY AND FIRM GROWTH TO FIRM VALUE

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Abstract: The purpose of this study is to determine the effect of profitability and firm growth on firm value and to determine the ability of a capital structure to moderate profitability and growth on firm value. This research was conducted on non-cyclical consumer sector companies listed on the Indonesia Stock Exchange (IDX) for the period of 2016 to 2020. The population in this study amounted to 92 companies. The sample was collected by using a purposive sampling technique with a total of 59 companies. This study used analysis technique of moderated regression analysis (MRA) and data processing used SPSS program. The results of the study using moderation regression analysis reveals that profitability has no effect on firm value, and firm growth has a positive and significant effect on firm value. Besides, the capital structure is able to moderate by weakening the influence of profitability on firm value. However, the capital structure is not able to moderate the influence of firm growth on firm value.

Keywords: profitability, firm growth, capital structure, firm value

Introduction

The firm value illustrates the prosperity obtained by shareholders in the long term. This makes the company's long-term goal to maximize the value of the company. Proper management of the company will produce maximum company value. Company value can be maximized by the company through its performance. This can be seen in the company's ability to generate profits and the growth of its performance results. Companies with the ability to make profits and have high growth will make the company more attractive in the eyes of investors investing in the company. This will increase the value of the company.

The greater the increase in profits and asset growth, the greater the need for funds to develop the company. Therefore, the company must be able to manage its capital structure properly. The optimal capital structure will assist the company in increasing the firm value. Consumer non-cyclicals sectors were chosen because these companies carry out production or distribution activities of products and services. In this case, what is sold to consumers is primary or basic goods so that the demand for goods and services is resistant to the crisis because the goods offered are goods that are needed by consumers every day. The purpose of this study was to determine the effect of profitability and company growth on firm value and to determine the ability of a capital structure to moderate the effect of company profitability and growth on firm value.

Literature Review

According to Ross, et al. (2019: 1), "The purpose of the firm is to create value for you, the owner. The purpose of creating this value can be demonstrated by maximizing firm value. According to Sudana (2011: 7-8), "Maximizing the value of the company means maximizing the present value of all the benefits that will be received by shareholders in the future without compromising the existing risks". Firm value is often associated with the stock prices. The stock price will be formed through the demand and supply of stock. According to Harjito & Martono (2011: 13), "For companies that have gone public, the firm value will be reflected in the market value of its shares. The higher the stock price, the higher the value of the company.

According to Sudana (2011: 23-24), "If the company is well managed and has effective and efficient operations, it can have a higher market value than the book value of the company". Husnan and Pudjiastuti (2015: 265) argue that the stock price of a company does not only reflect all publicly available information, but also information that can be collected and carried out for fundamental analysis. It can be seen that when the performance of a company increases, it will increase the share price because the information obtained by the public illustrates the company's prospects as profitable for the company owner.

The firm value will be measured using a valuation ratio. The Valuation Ratio or what is called the Valuation Ratio is a ratio that provides an overview of the company's ability to generate market value for its business with the capital it has invested. The indicator used to measure company value is Price to Book Value (PBV). Harmono (2011: 114), asserts that "Price to Book Value can be calculated by comparing the stock price with the book value of the stock".

Companies must be able to create value for shareholders. Djaja (2017: 28) argues that companies can create value (Creation of Value) by investing with current cash to generate higher profits in the future. In this case, it can be seen that to be able to create high value, the company must be able to generate high profits in the future. The company's ability to make a profit can be measured by profitability. According to Harjito & Martono (2011: 19), "Profitability is the company's ability to earn profits from the capital used to generate profits". In this study, profitability will be measured using the Return on Equity. Return on Equity was chosen as an indicator because it can show the company's ability to provide returns in the form of profits on the equity it manages.

Baruallo (2011: 89) argues, "Equity capital is the company's ability to generate profits by using its own capital (equity)". Return on Equity can be calculated by comparing the income after tax with the capital owned by the company. Sudana (2011: 22) emphasizes that "The higher the ratio of Return on Equity means the more efficient the use of capital by the management".

Profitability has a relationship with firm value. This relationship can be seen if the profitability of a company is high, it will give an effect in the form of a signal that the company can guarantee the prosperity of shareholders with a high rate of return. This affects the decision of investors in the capital market to invest their capital. So that the demand for these shares will increase and make the company's share price also increase along with an increase in the firm value. This is in line with previous research conducted by Varaiya, Kerin, and Weeks (1987) and research by Tui, et al. (2017) who got the results from researches conducted, that the profitability ratio has a positive effect on firm value.

Koller, Godheart and Wessels (2020: 102) stated that "In general, the empirical evidence supports that idea that growth and profitability are the key drivers of value". So it can be seen that not only the company's ability to generate profits, but company growth also plays an important role in increasing company value. When the company shows growth, the company will add various assets

to improve its performance. One indicator of company growth that can be used is the growth of company assets.

The company continues to grow when the number of assets it owns also increases. Harahap (2010: 309) argues that the company's growth represented by asset growth can be measured by comparing the difference between the current year's assets with assets in the previous year. When the company has high asset growth, the company gives an idea to investors that the company is still in the development stage and has increased performance. The increased performance will result in maximum company value. According to Damodaran (2012: 518), "The price to book value increases as the growth rate increases". This is in line with previous research by Varaiya, Kerin, and Weeks (1987) and research conducted by Fajaria and Isnalita (2018) which states that company growth has a positive effect on company value.

Djaja (2017: 181) emphasizes that "When growing, companies will be faced with a fundamental question, namely how is the relevant capital structure to finance the company's growth." It is known that when the company is going to increase the company's growth it must have sufficient funds.

A company must be able to regulate its funding and financing decisions in order to improve its performance which leads to an increase in the firm value. The decision can be in the form of managing the company's capital structure. Koller, Godheart and Wessels (2020: 633) also emphasize "Making the right decisions about capital structure will create a great deal of value; it's that making the wrong calls can destroy a tremendous amount of it". Bernstein and Wild in Sugiarto (2009: 1-2) state that "Capital structure is a combination of debt and equity in a company's long-term financial structure which better illustrates the long-term target composition of debt and capital (equity) in a company. Ross, et al. (2019: 489) emphasizes that "Managers should choose the capital structure that they believe will have the highest firm value because this capital structure will be most beneficial to the firm's stockholders".

Equity in the capital structure will refer to the capital risk for investors in a company. This equity capital does not have a mandatory dividend requirement. Meanwhile, debt has a requirement to pay off along with the interest regardless of the condition of the company at that time. According to Subarmanyam (2014: 163), "The greater the proportion of debt in the company's total capital structure, the higher the fixed expenses and repayment commitments that will be incurred". Companies must balance funding sources from debt and capital in order to produce optimal results.

Brigham and Houston (2001: 23) argue that the optimal capital structure is a capital structure that maximizes the value of the company which affects the amount of company debt. Meanwhile, according to Harjito and Martono (201: 256), "The optimal capital structure is a capital structure that minimizes the cost of using capital so that it will maximize the firm value".

The theory discusses the capital structure, one of which is the theory of Trade-off Theory. Trade-off theory is a theory in which companies make the right proportion between debt and capital in order to benefit from debt financing. On the other hand, the addition of the company's total debt will increase the company's chances of default which can lead to company bankruptcy.

Brigham and Houston (2001: 34) state that "Interest on debt is a deductible expense, so that the cost of debt will be cheaper than costs from external sources". The decision in selecting funding sources raises the question of whether a company will increase debt or issue new shares when the company needs capital.

Ross, et al. (2019: 532) argues that a rational investor will tend to assume a company has a higher firm value than the level of capital structure used with a higher proportion of debt compared to its equity. This is because the use of debt can minimize losses that will be received by the owner of the company. With the opportunity for losses that are getting smaller, it will have a good impact on the value of the company. According to Harmono (2011: 112), "The company's capital structure can use the Debt to Equity Ratio where a comparison is made between total debt and total capital".

The capital structure or the selection of the company's funding sources will take part in generating profitability. This leads to increase the value of the company. Optimal capital structure accompanied by increased profitability is expected to increase firm value. Sugiarto (2009: 91) argues that when the company's profitability is low, the company will have a higher proportion of capital structure with a higher proportion of debt. This is to anticipate risks in the form of losses that may be experienced by the owner of the company. increases profitability, companies use retained earnings to fund their expansion and will then use debt when retained earnings are insufficient to fund them.

Husnan and Pudjiastuti (2015: 302) argue that the use of a capital structure can be justified if the capital structure will reduce the company's cost of capital to increase profitability which leads to increasing company value. In their research, Rahayu, Suhadak and Saifi (2020) stated that capital structure can moderate profitability to firm value. Researches conducted by Fuente, Ortiz and Velasco (2021) and Salimah, Herliansyah (2019) also state that capital structure is able to moderate profitability to firm value.

Husnan and Pudjiastuti (2015: 3) argue that when the company grows better, the company will need additional assets such as machines, buildings, vehicles, and raw material inventory used to improve its performance. The increase in assets will make the company look for sources of funds to finance these needs. Ross, et al. (2019: 61) also state that "The growth in assets requires the firm to decide on how to finance that growth."

Ross, et al. (2019: 71) argue that an increase in the debt-equity ratio will provide additional capital for the company. This will increase the sustainable growth rate, and sustainable growth rate will make the company more attractive in the eyes of investors and lead to an increase in company value. According to Husnan and Pudjiastuti (2015: 97), "If the company's activities increase, the company will need more assets. Asset growth will require funding sources."

From this, it can be seen that high company growth will require greater funds. High company growth accompanied by an optimal capital structure indicates that the company's performance increases and increased performance will lead to an increase in company value. Previous research conducted by Pham, Kalybara, and Islam (2020) stated that capital structure moderates firm growth on firm value.

Methods

This research uses the technique of moderated regression analysis (MRA). For the data in this study, the author uses secondary data sources. The data source used is 2016 to 2020 consolidated financial statements that have been audited and published by companies in the Consumer Non-Cyclicals. The data source is accessed through www.idx.co.id. The Population Website in this study amounted to 92 companies which were then sampled using purposive sampling technique. Purposive sampling is a sampling technique using certain considerations. These considerations are:

- Companies in the Consumer Non-Cyclicals an Initial Public Offering (IPO) on the Indonesia Stock Exchange before 2016.
- The company did not experience suspension in the year of observation.

Based on the predetermined criteria, there are 59 companies in the Consumer Non-Cyclicals as the research sample. Therefore, from a sample of 59 companies, 295 data were obtained and used in the study.

The variables in this study consisted of the dependent variable, the independent variable, and the moderating variable. According to Sugiyono (2013: 97), "The dependent variable is a variable that is influenced or which is the result, because of the independent variable". The dependent variable used in this study is firm value. According to Harmono (2011: 114), firm value can be calculated by the ratio of price to book value. Price to book value can be calculated using the formula:

$$PBV = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$$

According to Sugiyono (2013: 96), "Independent variables are variables that influence or cause changes or the emergence of the dependent variable (bound). In this study, the independent variables used are profitability and company growth. According to Harjito and Martono (2011: 60), Profitability can be calculated by the ratio of return on equity (ROE). Return on equity (ROE) is calculated using the formula:

$$ROE = \frac{\text{Net Income}}{\text{Total Assets}}$$

According to Harahap (2010: 309), company growth can be calculated by asset growth. Asset growth is calculated using the formula, namely:

$$\text{Asset Growth} = \frac{(\text{Total Asset}_t - \text{Total Asset}_{t-1})_t}{\text{Total Asset}_{t-1}}$$

According to Sugiyono (2013: 97), "The moderator variable is a variable that affects (strengthens and weakens) the relationship between the independent variable and the dependent variable". The moderator variable used in this study is the capital structure. According to Harmono (2011: 114), the capital structure can be calculated by the debt to equity ratio (DER). Debt to equity ratio (DER) is calculated using the formula:

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

To find out whether the moderating variable in this study, namely the Debt to Equity Ratio able to strengthen or weaken the relationship between the independent variable, namely Return on Equity and Asset Growth, to the dependent variable, namely Price to Book Value, the regression equation below is used:

$$PBV = \alpha + \beta_1 ROE + \beta_2 DER + \beta_3 ROE * DER + e$$

$$PBV = \alpha + \beta_1 PTP + \beta_2 DER + \beta_3 PTP * DER + e$$

Description:

α = Constant
 β_{1-3} = Regression Coefficient of each

- ROE = Return on Equity
 PTP = Company Growth
 DER = Debt to Equity Ratio
 ROE*DER = Moderating Variable (interaction between ROE and DER variables)
 PTP*DER = Moderating Variable (interaction between PTP and DER variables)
 e = Error

Findings

Testing the Regression Equation Before Moderation

In the analysis of this linear regression equation, it is used to determine the relationship between the return on equity and the company's asset growth as an independent variable on price to book value as the dependent variable.

Table 1. Results of Regression Equation Testing Before Moderation

	Coeff	SE	t	Sig.
Constant	0.276	0.061	4.535	0.000
ROE	0.001	0.071	0.011	0.991
PTP	1.557	0.42	3.708	0.000

Source: Processed Data from SPSS 23, 2022

Based on the test results in table 1, it can be formed multiple linear regression equations as follows:

$$PBV = 0.276 + 0.001 ROE + 1.557 PTP + e$$

From the multiple linear regression equation above, it can be explained that the constant value is 0.276 which means that if the ROE and PTP variables are equal to zero, the PBV value is 0.276. The ROE regression coefficient is 0.001 which means that every increase in the ROE value of 1 will cause an increase in PBV of 0.001 with the assumption that all other independent variables are constant. The PTP regression coefficient is 1.557 which means that every increase in the PTP value of 1 will cause an increase in PBV of 1.557 with the assumption that all other independent variables are constant.

Then the coefficient of determination is tested. In this study, the analysis of the coefficient of determination uses the Adjusted R Square. The following table 2 results of testing the analysis of the coefficient of determination before there is a moderating variable:

Table 2. Results of Testing the Coefficient of Determination Before Moderation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.222	0.049	0.043	0.95454

Source: Processed Data from SPSS 23, 2022

Based on Table 2, the value of Adjusted R Square before the moderating variable shows a value of 0.043 or 4.3 percent. This states that the ROE and PTP variables are able to provide an explanation of the PBV by 4.3 percent, and the remaining 95.7 percent is explained by other variables.

Based on Table 1, it can be seen that the significance value of the ROE variable is 0.991 which means that the significance value is greater than 0.05. It can be concluded that the ROE variable does not have a significant effect on the PBV variable. The PTP variable has a significance value of 0.000 which means that the significance value is less than 0.05. It can be stated that the PTP variable has a significant effect on the PBV variable.

Testing the Regression Equation After the Moderation Variable

Testing the moderating variable is a test that aims to determine whether the presence of a moderating variable can strengthen or weaken the relationship between the independent variable and the dependent variable. In this study, the debt-to-equity ratio variable is used as a moderating variable in the relationship between the return on equity and the growth of company assets on price to book value. The following are tables 3 & 4 of the regression results after the moderating variable.

Table 3. Results of ROE Variable Testing on PBV with DER as Moderating Variables

	Coeff	SE	t	Sig.
Constant	0.143	0.072	1.982	0.048
ROE	2.593	0.252	10.298	0.000
DER	0.038	0.041	0.929	0.353
ROE_DER	-0.002	0.001	-4.295	0.000

Source: Processed Data from SPSS 23, 2022

Based on Table 3, the moderating regression equation is formed as follows:

$$PBV = 0.143 + 2.593 ROE + 0.038 DER - 0.002 ROE_DER + e$$

From the multiple linear regression equation above, it can be explained that the constant value is 0.143. This means that if the ROE variable, DER variable, the interaction variable, ROE_DER are equal to zero, so the PBV value is 0.143. The ROE regression coefficient is 2.593 which means that every increase in the ROE value of 1 will cause an increase in PBV of 2.593 with the assumption that all other independent variables are constant. The DER regression coefficient is 0.038. It means that every increase in the DER value of 1 will cause an increase in PBV of 0.038 with the assumption that all other independent variables are constant. The regression coefficient of the ROE_DER interaction is -0.002 which means that every increase in the value of the ROE interaction and DER of 1, it will cause a decrease in PBV of 0.002 with the assumption that all other independent variables are constant.

Table 4. Results of PTP Variable Testing on PBV with DER as Moderating Variables

	Coeff	SE	t	Sig.
Constant	0.278	0.079	3.542	0.000
PTP	1.862	0.657	2.834	0.005
DER	-0.016	0.034	-0.466	0.642
PTP_DER	-0.001	0.003	-0.403	0.687

Source: Processed Data from SPSS 23, 2022

Based on table 4, the moderating regression equation is formed as follows:

$$PBV = 0.278 + 1.862 PTP - 0.016 DER - 0.001 PTP_DER + e$$

From the multiple linear regression equation above, it can be explained that the constant value is 0.278, this means that if the variable PTP, DER, interaction PTP_DER, equal to zero, the PBV value is 0.278. The PTP regression coefficient is 1.862, this means that every increase in the PTP value of 1 will cause an increase in PBV of 1.862 with the assumption that all other independent variables are constant. The DER regression coefficient is -0.016, this means that every increase in the DER value of 1 will cause a decrease in PBV of 0.016 with the assumption that all other independent variables remain. The regression coefficient of the PTP_DER interaction is -0.001, this means that every increase in the value of the ROE interaction and DER of 1, it will cause a decrease in PBV of 0.001 with the assumption that all other independent variables are constant.

Then the coefficient of determination was tested using the Adjusted R Square. The following are tables 5 and 6 of the analysis of the coefficient of determination after moderation.

Table 5. Test Results for the Coefficient of Determination of the ROE. Variable against PBV with DER as Moderating Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.545	0.297	0.29	0.81409

Source: Processed Data from SPSS 23, 2022

Table 6. Results of Testing the Coefficient of Determination of PTP. Variable against PBV with DER as Moderating Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.242	0.059	0.048	0.9419

Source: Processed Data from SPSS 23, 2022

Based on Tables 5 and 6, the value of Adjusted R Square after the moderating variable shows values of 0.290 and 0.048. This means that with the moderating variable the relationship between the ROE variables provides an explanation of the PBV of 29 percent, and the remaining 71 percent is explained by other variables. Meanwhile, the moderating relationship between PTP and PBV can only provide an explanation of 4.8 percent, and the remaining 95.2 percent is explained by other variables.

Based on Table 3, it can be seen that the significance value of the ROE and DER Interaction variables has a significance value of 0.000. This means that the significance value is less than 0.05, and it can be concluded that the ROE. The interaction variable and DER have a significant effect on the PBV variable. Based on table 4, the interaction between PTP and DER has a significance value of 0.687. This means that the significance value is greater than 0.05, it can be stated that the PTP and DER interaction variables have no significant effect on the PBV variable.

Hypothesis Testing

The Hypothesis (H₁) in this study states that profitability has a positive effect on firm value. Based on the test results presented in table 1, it can be seen that the value of the ROE variable has a regression coefficient of 0.001 with a significance value of 0.991. This means that the return on equity does not affect firm value. Hypothesis H₁ is first rejected.

The second hypothesis (H₂) in this study states that firm growth has a positive effect on firm value. Based on the test results presented in table 1, it can be seen that the PTP variable has a regression

coefficient of 1.557 with a significance value of 0.000. The test results which show a significance value less than 0.05 indicate that the company's growth has a positive effect on firm value. So it can be concluded that the second hypothesis (H2) is accepted.

The third hypothesis (H₃) in this study states that capital structure can moderate the effect of profitability on firm value. Based on the analysis table, the coefficient of determination before the moderating variable presented in table 2 has an Adjusted R Square of 4.3 percent. Meanwhile, based on the analysis table, the coefficient of determination after the moderating variable presented in table 5 has an Adjusted R Square of 0.29 or 29 percent. The value of Adjusted R Square after moderation is higher than the value of Adjusted R Square before moderation. Based on the table of test results after the moderating variable presented in table 3, it can be seen that the value of the ROE and DER interaction variables has a coefficient value of -0.002 with a significance value of 0.000. This shows that the moderating role of capital structure weakens the relationship between profitability and firm value. So it can be concluded that the third hypothesis (H₃) which states that capital structure can moderate the effect of profitability on firm value is accepted.

The fourth hypothesis (H₄) in this study states that capital structure can moderate the effect of firm growth on firm value. Based on the analysis table, the coefficient of determination before the moderating variable presented in table 2 has an Adjusted R Square of 4.3 percent. Meanwhile, based on the analysis table, the coefficient of determination after the moderating variable presented in table 6 has an Adjusted R Square of 0.048 or 4.8 percent. Value Adjusted R Square after moderation does not have much difference when compared to the Adjusted R Square before moderation and based on table 4 the significance value of the interaction variable between the growth of company assets and capital structure (PTP_DER) is 0.687, which has a value greater than 0.05. So it can be concluded that the fourth hypothesis (H₄) which states that capital structure can moderate the effect of company growth on firm value is rejected.

Conclusion

Based on the results of the study using moderated regression analysis, it can be concluded that profitability does not affect firm value, while firm growth has a positive effect on firm value. Capital structure can moderate the effect of profitability on firm value but the capital structure is not able to moderate the effect of firm growth on firm value. The author gives suggestions to further researchers to increase the research period to get better results and consider the development of other independent variables, for example by using activity ratios and using other methods in measuring profitability variables such as using return on assets or net profit margin, and on growth variables. Companies can use sales growth or equity growth.

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Industry's Efforts in Creating Sustainable Business Based on Transfer Pricing and Competitive Advantage During Crisis Times

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Abstract: Within the scope of the economy, it will never be separated from the problem of the economic crisis, not only affecting the economy of a country but also business people. It has been record 3 times in the last 24 years the world has experienced an economic crisis and even now the world is still struggling to recover from the crisis due to the COVID-19 pandemic, therefore, in creating an economy that is able to survive in a crisis situation, cooperation between parties is needed, especially in the industrial sector. Industry because the economic crisis is not only micro but also multidimensional on a macro scale. In applying for a crisis, a breakthrough is needed so that a country can control the economy during a crisis, one of which is the creation of a conducive climate in the industrial sector. The concepts of transfer pricing, value chain, competitive advantage, competitive comparative and the renegotiation process are the means to create a sustainable business, which makes it easier for the industrial sector to synergize by implementing a balanced growth system by enabling the renegotiation process in the face of obstacles. The creation of a conducive climate in the industrial sector will create new collaborations between industries that are able to assist the government of a country in dealing with situations of economic crisis.

Keyword: Transfer Pricing, Sustainable, Competitive Advantage, Renegotiation, Crisis

Introduction

The Covid-19 pandemic has hit the world, especially the State of Indonesia, not only has an impact on increasing the number of fatalities, but also has a broad and direct impact on the decline in the world economy. Data from the Central Statistics Agency reported that Indonesia's economic growth contracted by 5.32% in the second quarter of 2020. In the first quarter, it contracted by 6.13%, which is the worst record for the economy since 1999. Predictions that the global economy will enter a deep recession sharp until the end of the first quarter of 2020 has been informed by the International Monetary Fund and the World Bank

Many companies must take efficient and austerity actions so that their companies do not fall into this crisis, namely by tightening the company's budget. In fact, even though every effort has been made to stay afloat, continuous losses have led to a bitter decision in which many companies have had to put their business down. As a result, thousands and even millions of people in Indonesia are currently at the potential of experiencing unemployment. Poverty is of course on the verge of death and solutions must be found. Companies that are still surviving the impact of the global financial crisis are taking actions that must be out of the box, but focused on making efficiency in various sectors. Things that can be done are reducing employees, temporarily laying off employees, cutting budgets, delaying payment of tax burdens and even trying to avoid tax

Companies are required to make adjustments to the original purpose of their business,

which initially tried to get as much profit as possible, has now turned into doing business so that the company does not suffer huge losses due to the world financial crisis. The ability and expertise in managing finances and management are important at this time. Setting and saving the company's cash flow is an important action taken so that the business can run as expected. The company's actions to save are believed to be able to make the company survive and remain competitive in global competition. Capability factors such as competitive advantage in product and market innovation and efficiency in the procurement, production and marketing processes are the basic capital for a company to survive in this competition

Multinational companies that have a global network to other countries, one of the tax savings efforts that can be done is through transfer pricing policies. By implementing this policy, it is expected that multinational companies can manage the desired profit or expense through control between groups of companies. Tax savings through this policy has been a debate between taxpayers and tax authorities to date. For taxpayers, this policy is considered as a form of tax planning in order to reduce the tax burden. This is different from the tax authorities who view the policy as a form of tax avoidance, thereby causing a loss of potential state revenue from the tax sector

The globalized scale of operations of multinational companies makes transfer pricing an unavoidable phenomenon. The development of transactions between affiliates or intercompany transactions raises international taxation problems between countries, both from the side of the tax apparatus and the multinational companies themselves. This arises because the countries entering into the transaction do not always refer to the provisions of international taxation.

Transactions that occur between multinational groups of companies can be categorized into several transactions, such as the sale or purchase of goods and services, licenses, royalties, patents, management services and technical services and so on. Multinational companies can easily determine the price of goods, services, intangible assets or the allocation of costs including intercompany costs for tax avoidance purposes. Not infrequently the impact of transfer pricing causes prices to be too high (overpricing) or perhaps vice versa, prices are too low (underpricing). Other efforts that are often made include allocating costs from countries with low tax burdens to countries with high tax burdens or shifting prices from countries with high tax burdens to countries with low or possibly zero tax burdens (tax haven countries)

Based on the background explanation above, the purpose of writing this paper is to examine and describe the transfer pricing system using a value chain approach, competitive advantage and renegotiation. The company's goal to increase profits as much as possible makes companies try to find ways to reduce the company's burden, but keep profitability. awake. Coupled with uncertain economic conditions leading to downturns and crises, companies work hard in order to survive in global competition. This can be seen in the efforts to save the company's costs, including saving the tax burden..

Literature Review

Transfer Pricing

Transfer pricing is a classic issue in the field of taxation, especially regarding international transactions carried out by multinational corporations. It is further stated that this tax issue between countries cannot be considered as a matter in each jurisdiction separately, but must be

viewed in the context of the wider international tax network (OECD, 2022).

Transfer pricing was initially only a major issue for tax administrations and tax experts, but nowadays transfer pricing has become a topic of discussion among international economists and international institutions. Tax administration in each country faces problems both at the policy and practice levels. At the policy level, it must consider the legitimate right of taxation on profits that are appropriately derived from activities in its territory and avoid taxation on the same income, which is the legal right of other countries to prevent international double taxation. Double taxes can hinder the mobility of goods, services and capital as well as investment between countries. At the practical level, tax administration is constrained by the fact that it is not easy to obtain taxation data and information outside of its jurisdiction.

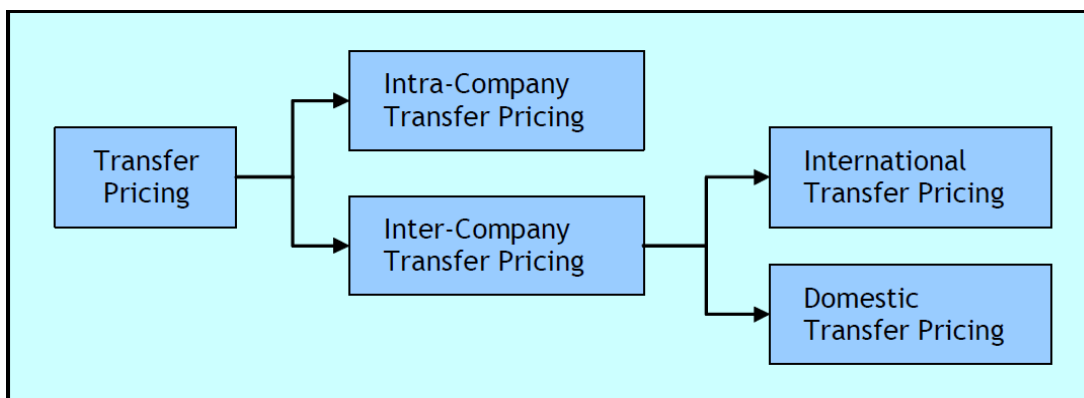
Transfer Pricing is a transfer pricing strategy carried out by related parties or commonly called related-party transactions. The purpose of transfer pricing is to control the company's profit as a group (Nguyen et al., 2019). Companies can use various transaction approaches to achieve this goal, for example through the purchase or sale of goods, both tangible and intangible. Other transactions can be in the form of payment of loan interest, royalties, services, and so on. Transfer pricing, in principle, is not a tax crime, but rather a corporate strategy as a group to be able to streamline tax payments.

On the other hand, most of the tax authorities have a different perspective. Transfer pricing carried out by related parties is seen as being able to erode a country's tax revenues (base erosion and profit shifting) (Setiawan, 2013). Counter-transactions from multinational companies located in tax havens will make tax authorities pay more attention to dealing with base erosion. However, for some tax authorities, transfer pricing does not have a big impact on tax revenues (Nguyen, 2019).

Strategies used by multinational companies to save on tax payments globally are for example by setting up companies in countries with low tax rates or zero tax rates. Transfer pricing guidelines introduced by both the Organization of Economic Cooperation and Development (OECD) and the United Nations (UN) explain that there are several approaches to resolving transfer pricing issues, including: arm's length principle (ALP), safe harbor, and global formulary apportionment. The OECD itself recommends its member countries to use the ALP approach. Most countries use ALP because it is considered more practical to apply and generally accepted as well as effective in preventing tax evasion

Nguyen (2019) divides the transfer pricing method into two classifications, namely the traditional method and the profit method. The traditional methods consist of the comparable uncontrolled price (CUP), the cost-plus method (CPM), and the resale-price method (RPM). Meanwhile, the profit method consists of the transactional net margin method (TNMM) and the profit split method (Irawan, 2021). A similar research is also described by Rossing et al. (2017). Rossing et al. (2017) explained that multinational companies can opt for the appropriate transfer pricing method. The substance of the transfer pricing methods is as follows. The CUP method is based on direct observation of comparable market prices. Another method is based on comparable market profits. The CUP method is a more appropriate method because it provides a comparable market price to justify the transfer price. When the CUP method cannot be applied due to the absence of comparison data, the next preference is the use of gross profit, in this case the cost-plus method and the resale-price method. When the gross profit method cannot be applied, the next method that can be chosen is the net profit method, in this case the TNMM and profit split. Based on this description, it can be seen that Rossing et al. (2017) recommends the use of a hierarchical transfer pricing method.

Transfer pricing groupings can be divided into, as shown below:



Several factors influence the choice of transfer method, among others: cash flow requirements, demographic and behavioral variables, and applicable transfer pricing regulations. The transfer pricing method that can be used to handle transactions in the form of services (intra-group services) consists of several methods. These methods are CUP, CPM, RPM, TNMM and Profit Split. However, in practice, it is not easy to find truly comparable comparison data. Therefore, it can be continued by using other methods such as the cost-plus method

A similar study was conducted by Hsu et al. (2019) which explains that the transfer pricing method can be used to fulfill the ALP. The main method used is a method that uses a market approach, namely CUP. If the CUP method cannot be applied, a non-market approach such as CPM or RPM can be used. Research conducted by Juranek et al. (2017) indicated that the use of traditional methods (CUP, PSM, and RPM) did not change investment behavior. On the other hand, the use of the profit split method can trigger investments to facilitate the shift of higher profits. Research conducted by Kekana (2020) discusses the use of transfer pricing methods in order to resolve tax disputes through the Advance Pricing Agreement (APA) mechanism. The research is meant that taxpayers can apply certain methods in the APA. Furthermore, the method is tested by the tax authorities to ensure compliance with the type of related party transactions, and the correctness of the calculation

Padhi (2019) investigates several possible reasons why multinational companies use certain transfer pricing methods. In addition, this study also looks at the possibility of manipulation in the use of the transfer pricing method. Tørsløv et al. (2020) argues that the transfer pricing method is a tool to determine fair prices or in accordance with ALP. In some types of transactions (such as royalty payments and brand purchases) the concept of a fair price is still unclear. A study conducted by Picciotto (2020) explains that there is a paradigm shift in the use of transfer pricing methods. The profit split method is an alternative option to solve transfer pricing problems when adjustments are made by the tax authorities. This is supported by a study conducted by Cadet (2015) which recommends the use of the profit split method by both taxpayers and tax authorities.

Transfer Pricing which was originally introduced by the branch of Management Accounting, which focuses more on efficiency in managing existing resources, so that in determining the location of the production process it depends on the competitive advantage of an area, so as to create efficiencies which will lead to the company's ability to create added value for the company. This continues with the use of transfer pricing associated with tax savings.

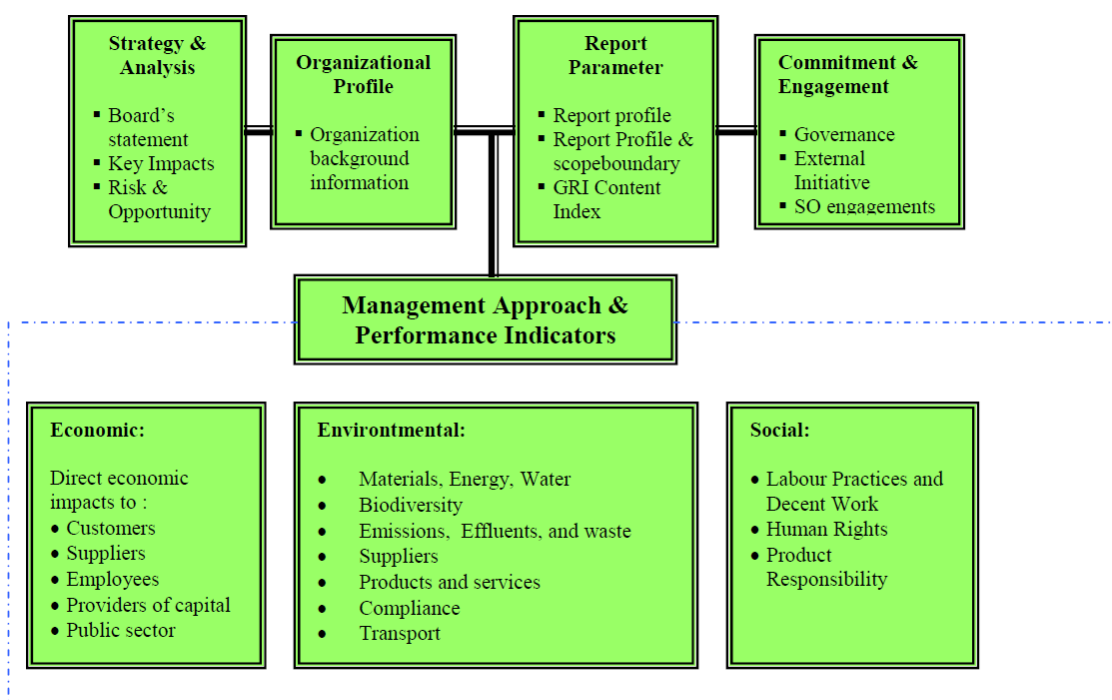
Sustainable

Sustainability is a new orientation for stakeholders, because we have to think that this world is a deposit from the next generation, so that in doing business Management must not only consider the short term, but also the long term, besides that it must also grow and develop together with stakeholders and the environment.

Corporate Sustainability Management (CSM) (Maharani, 2014) is that business organizations, both government and private manufacturing and services, in planning and implementing their policies must be oriented to social and environmental aspects, not merely profit for the survival of present and future generations. Development carried out by the government, business industry, community and non-governmental organizations (NGOs) to meet the needs of human life today must not interfere with the ability of future generations to meet their needs or is referred to as sustainable development.

Since 2002 a Sustainability Report form has been developed by the Global Reporting Initiative. Company reports related to CSR-oriented business policies are compiled in Sustainability Reporting based on the Sustainability Reporting Guidelines (RG). RG has been the only guideline for companies both at home and abroad to make Sustainability Reporting where the RG was compiled by the National Center for Sustainability Reporting (NSC) with references from the world's independent institution, namely the Global Reporting Initiative based in the Netherlands. Global Reporting Initiative (GRI) is an independent institution founded in 1997 in Boston, USA with multi-professional membership such as accountants, entrepreneurs, investors, environmental organizations, human rights organizations, research institutions and labor organizations from various countries.

The diagram below explains what components are reported in the Sustainability Report based on the Sustainability Reporting Guidelines



Competitive Advantage

Competitive Advantage introduced by Porter in (Dalimunthe, 2017) explains the determinants of a company's competitive advantage, namely (1) Condition factors include quality, skills, labor, availability, quality, accessibility, availability of knowledge resources. , the amount and cost of capital sources within the financial industry structure, and the availability and quality of physical infrastructure; (2) Demand conditions include, among others, the composition of market demand, market size and growth; (3) Related industries and supporting industries include, among others, the existence and quality of supporting industries and the relationship between local industries in the coordination and distribution of activities in the value chain; and (4) external factors, including new discoveries and factors from the government

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From several expert opinions, the operational definition of competitive advantage is summarized as the ability of businesses to create competitive advantages in order to compete with competitors. The indicators of competitive advantage were developed from several experts, namely competitive prices, management capabilities, profits, strategic positions and places

Chen in (Dalimenthe, 2017) further explains that there are four measurements of a company's competitive advantage, including; 1) whether the company has lower costs compared to competitors; 2) whether the company has a better managerial ability than competitors; 3) whether the company has better profitability; and 4) whether the company is a prime mover in several areas and occupies an important position.

The picture of the competitive advantage process according to porter is as follows:



Re-Negotiation

Re-negotiation is a process to review something that has been agreed upon, this is of course due to a change in something that is beyond the control of both parties. Reviewing something that has been agreed is of course to avoid one of the parties experiencing losses due to something out of control. The engagement of course aims for both parties to benefit from the engagement

This activity is called the Business Plan Continuity (BPC) or Business Continuity Plan ((Sari; & Fitriyani, 2021) which is a policy and procedure that contains a series of planned and coordinated activities regarding preventive measures and system recovery in the event of a disturbance/disaster. caused by internal or external factors.

In making a BPC document, there are several stages that must be done, namely:

- a. Project Initiation;
- b. Risk Assessment *a process for identifying potential hazards and analyzing what would happen if they occurred. There are a variety of hazards to consider;*
- c. Business Impact Analysis, which is a business impact analysis on understanding which processes are vital in a business to run operations and to understand the impact of the disruption of these processes;
- d. Mitigation Strategy Development, namely risk mitigation is defined as taking steps to reduce side effects. This stage is a process commonly used in risk management, but in this case risk mitigation is also related to business continuity and disaster recovery.

Crisis

Crisis or economics is called systematic risk, the definition of systematic risk (Wikipedia) Systematic risk is a risk that cannot be avoided, systematic risk comes from inflation, foreign exchange rates, interest rates and market risk. This systematic risk cannot be diversified, cannot

use asset allocation, cannot be predicted. Usually systematic risk is measured by Beta.

The Covid 19 pandemic is an example of a systemic risk, where business becomes abnormal, the market does not exist because of activity restrictions, the export-import process also stops, production stops, layoffs continue, prices for basic necessities go up, because supplies don't work available.

Methods

This research uses descriptive qualitative method based on literature study and in-depth analysis. Qualitative research is a method used to understand the phenomena experienced by research subjects by describing in the form of language, words, and special natural contexts (Sugiyono, 2014). Literature studies include those from relevant national and international journals, trusted web sources, as well as several articles published online. The scope of this research focuses on Indonesia's economic problems during the pandemic. The purpose of this research is to prevent Indonesia from the threat of an economic recession which is pursued by developing strategies that can be carried out by both the government and the related community. Data analysis was carried out by representing the data obtained with the referenced literature to map the relevant strategies.

Findings (Discussion)

Corona Virus Disease 2019 or what is known as Covid-19 has a wide impact on various aspects, especially the stability of the national economy. This is evidenced by the decline in revenue so that several companies experienced a crisis and even went bankrupt. As a result, there are companies that carry out Termination of Employment (PHK) which results in an increase in unemployment. The Ministry of Manpower said, as of June 2, 2020, around 3.05 million people were affected by COVID-19 and it is estimated that there will be an additional 5.23 million people. In addition, the impact of Covid-19 has also entered the mining sector. One of the impacts is the decline in demand for mining commodities because many importing countries have implemented lockdown policies, while production output is still low.

To handle employee layoffs and relationships with vendors and suppliers, it is necessary to renegotiate using the BPC (Business Plan Continuity) process with the Project Initiation, risk assessment, Business impact and Mitigation strategy development (Gatot Budi) stages, so that a solution can be found that benefits both parties. parties, due to external conditions.

Sustainability reporting that emphasizes transparency as a form of CSR will also improve the company's image and stakeholder trust in the company so that stakeholders including investors will continue to maintain good relations with the company. (Cahyandito, 2009). Investors increasingly have a desire to invest in companies whose practices are related to good social and environmental practices (Burhan, 2009). In the journal "The Impact of Corporate Performance Sustainability Reporting" write the results of a survey conducted by KPMG that companies that are attached to environmental, social and sustainability reports in their financial statements have started to increase significantly

Transfer pricing is a tool to measure the performance of an entity so that the selection of transactions takes into account aspects of the supply chain, competitive advantages of each party so that efficiency and effectiveness are achieved. By using a transfer pricing mechanism, the selection of parts that are carried out by those who have advantages so that the results will certainly

obtain an efficient process and of course will reach the point of effectiveness as expected.

Cost leadership is the most appropriate choice for pandemic conditions, cooperative for business strategy, and retrenchment for Corporate Strategy.

The experience gained by the author in dealing with the COVID-19 pandemic, which began in March 2019. The company being managed is a coal mining company with a location in the South Kalimantan area. In the management of natural resources, the most important thing is Synergy between experienced parties and the coal industry.

Coal processes can be broadly divided into Land Opening; Top Soil; striping overburden, Overburden Removal, Coal Cleaning, Coal Getting, Coal Hauling; Run of Mine (ROM); crushing; Stock Files; preparation; Coal Barging; Transshipment. Since 2018, it has streamlined business processes by partnering with competent parties or having competitive advantages so that they can be more efficient. The Land Opening process to coal cleaning is carried out by competent mining contractors with only about 10% of the voting shares being given to the contractor company, as well as the Coal Hauling and Transshipment processes. We only do the Coal Getting, ROM, Crushing, Stock File and Coal Barging processes.

When the Pandemic started, there was a decrease in the selling price of coal, so the first step we took was to re-negotiate the agreement with partner companies. can get through the pandemic without sacrificing other stake holders

CONCLUSION

Re-Negotiation, This is the first step to re-negotiation with employee, Vendor and Supplier getting mutual understanding external condition. Sustainable, sustainable reporting to increase trust from stakeholder. Transfer Pricing, this will be improved value chain, and efficiency in operation Competitive advantage, Cost leadership, Cooperative (Alliance) and Retrenchment strategy

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Factors Affecting Employee Performance of The Financial and Development Supervisory Agency

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Abstract : This study aims to examine, analyze and explain the influence of leadership style and working environment to employee performance simultaneously and partially at The Financial and Development Supervisory Agency in North Sumatera Representative Office.

The primary data used in this study come from questionnaire on respondents' leadership style, working environment and employee performance. From 82 people as the population, 67 respondents who met the criteria as a sample were chosen by using the Slovin Formula. The analytical method used is multiple linear regression analysis using SPSS 22.

The results of this study indicate that there is a positive and significant influence simultaneously between leadership style and working environment on employee performance. The results also show that there is a positive and significant influence partially between leadership style and working environment on employee performance.

Keywords – Leadership style, working environment, employee performance.

Introduction

The Financial and Development Supervision Agency is a government agency that carries out government duties in the field of financial supervision and development in accordance with the provisions of applicable laws and regulations.

Through Presidential Regulation No. 192 of 2014, The Financial and Development Supervisory Agency has the task of organizing government affairs in the field of state/regional financial supervision and national development. In carrying out these duties, The Financial and Development Supervisory Agency carries out two main functions, namely the directing and coordinating function of internal supervision and the internal supervision function.

In performing these functions, in the Strategic Plan for 2020-2024 The Financial and Development Supervisory Agency has set performance indicators and targets at the The Financial and Development Supervisory Agency organizational level. All performance indicators listed in the Strategic Plan are key performance indicators (KPI) at their respective levels.

The results of the achievements of BPKP KPI in the last 3 years are as follows:

Table 1. Key Performance Indicator of The Financial and Development Supervisory Agency

No.	Fiscal Year	Key Performance Indicator Targets	Realization	
			Achieved	Not Achieved
1.	2021	16	10	6
2.	2020	12	5	7
3.	2019	8	1	7

The company's performance in the past two years showed a tendency to decline.

The decline in the company's performance can be caused by various factors, one of which is the performance of human resources as an organizational asset that runs the KPI.

Looking at the facts, the objectives of this research can be formulated as follows:

- to analyze and explain leadership style significantly affecting the performance of employees of The Financial and Development Supervisory Agency;
- to analyze and explain working environment significantly affecting the performance of employees of The Financial and Development Supervisory Agency;
- to analyze and explain leadership style, and working environment simultaneously and significantly affecting the performance of employees of The Financial and Development Supervisory Agency.

Literature Review

Leadership Style

Leadership style is a set of the features of a leader to influence subordinates so that organizational goals can be achieved (Rivai, 2011). To be a good leader, a leader should be able to choose what kind of leadership style is suitable to be applied in the company to motivate employees as well as to discipline employees in the company.

Dimensions of leadership style in this study are challenge the process, inspiring, work together, to be a model of solution and motivating as the five categories of basic habit of leader behavior (Hamzah, 2008) deemed relevant to the situation experienced by The Financial and Development Supervisory Agency as to find out to do with the condition of discipline and employee performance.

Working Environment

Sedarmayanti (2008) divides the work environment into two types, namely physical and non-physical work environments. The physical work environment is all physical conditions that exist around the workplace that can affect employees either directly or indirectly. The physical work environment is divided into two categories, namely the environment that is in direct contact with and near employees (chairs, tables, etc.) and the intermediate environment (temperature, humidity, air circulation, lighting, mechanical vibration, unpleasant odors, colors and so on). The non-physical work environment is all conditions that occur related to work relationships, both relationships with superiors and relationships with fellow co-workers and relationships with subordinates.

Performance

Performance is the overall outcome or success of a person during certain periods of duty compared to the standard of the work, the targets or criteria that have been determined in advance and have been agreed (Rivai, 2004). Rivai further states that performance does not stand alone but is related to job satisfaction and compensation, influenced by the skills, abilities and individual traits. In other words, employee performance is determined by the ability, desire and environment. Employee performance is influenced by various characteristics of each individual. In the development of a competitive and globalized era, companies certainly require employees who are high achievers.

Objective performance assessments will give the right feedback to behavioral change toward increased productivity and expected performance. Assessment of performance in various forms such as key performance indicators or key performance index is basically an objective and systematic process to collect, analyze and use the information to determine the efficiency and effectiveness of employees' duties and achievement of targets. Performance assessment is based on understanding of knowledge, skill, expertise and behavior necessary to do a good job and a more extensive analysis of the attributes and behavior of individuals. Based on the points of variable assessment of such performance, the indicators used by the authors as a measure of performance variables in this study are the following elements of work assessment: impact on work

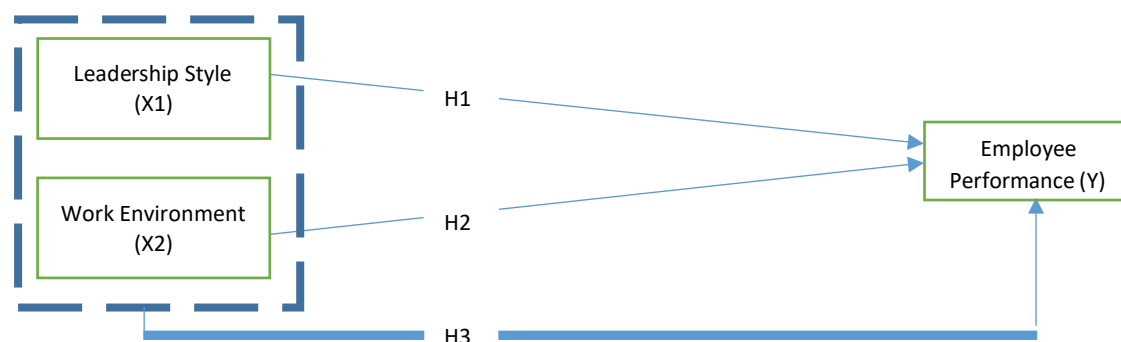
improvement, employee development, employee satisfaction, basis for compensation decisions and skill in communicating which will be described in the questionnaire as to describe the situation in The Financial and Development Supervisory Agency.

Method

Research Design

This research is based on a survey employing questionnaire on respondents' perceptions. The questionnaire is designed by using Likert scale. Likert Scale is used to measure attitudes, opinions and perceptions of a person or a group of people on a social phenomenon. In this study, social phenomenon raised is at BPKP designated as research variables.

Research Framework



Research Hypothesis

Based on the framework, the authors attempted to make a hypothesis as a temporary answer to the problems that existed in BPKP to be empirically tested as below:

- H1. There is a significant positive effect of leadership style on employee performance.
- H2. There is a significant positive effect of work environment on employee performance.
- H3. There is a significant positive effect between leadership style and work environment on employee performance simultaneously.

Population and Sample

The population in this study is employee at The Financial and Development Supervisory Agency who are permanent employees. Total population in accordance with defined characteristic, permanent employees was 451 employees. In this study, the sampling technique used is Slovin formula as follows:

$$n = \frac{N}{(N.d^2) + 1} = \frac{451}{(451 \times 0,12) + 1} = 82 \text{ respondents}$$

Data Collection Technique

Data collection techniques include interviews, questionnaire, observation and a combination of all the three. This study uses a combination of data collection techniques, namely, questionnaire, in the form of closed questionnaire in which answers have been provided by the researcher and the respondents simply have to choose the alternatives provided.

Data Analysis Method

There is a five-step analysis conducted in this research, namely, descriptive statistics,

quality test instrument (validity and reliability testing), classic assumption test (multicollinearity, heteroscedasticity test, normality test, linearity), data analysis (multiple regression analysis, F-test, t-test, R2 test) and the correlation between dimensions. Overall, data processing and analysis is conducted with the help of SPSS (Statistical Product for Service Solution) version 22.

Findings

Descriptive statistics

The questionnaires are distributed to 82 respondents, comprising 69 questions or statements that represent the four variables being studied. The variables are 19 question for leadership style (X1) and 16 questions for work environment (X2) and 34 questions for the last variable employee performance (Y).

Data analysis on these variables was done by using interval approach or weight descriptively tested and produced a description of the research data of the three variables in the average score or means, median, mode, standard deviation, variance, as well as the range, minimum, maximum, sum and others.

Multiple regression analysis

Multiple linear regression analysis is used to predict the situation (increase and decrease) od dependent variables when two or more independent variables as predictive factors are manipulated (increase and decrease in value) (Sugiyono, 2008)

Table 2. Results of multiple regression analysis

Model	Unstandardized coefficients		Standardized coefficients		Significance
	B	Standard error	Beta	t	
(Constant)	1.082	0.319	3.394	.001	
Total_Leadership Style	0.146	0.067	0.195	2.185	0.032
Total_Work Environment	0.218	0.088	0.253	2.483	0.015

Source: Data output SPSS version 22

Tabel 3. F-Simultaneous test results

Model	Sum of squares	ANOVA			Significance
		Df	Mean Square	F	
1					
Regression	3.633	2	1.211	29.305	0.000
Residual	3.223	79	0.041		
Total	6.856	81			

Source: Data output SPSS version 22

The effect of leadership on employee performance

H1 testing results prove leadership stle affects employee performance, t-values obtained was 2.185 with a significance level of $0.032 < 0.05$, which means to accept H_a and reject H_o . It has been stastically proven that leardership style individually or partially has positive and significant effect on employee performance – if leadrship is strong, in directing and leading employees, thus performance in carrying out the obligations and duties will also be good, and vice versa.

The effect of work environment on employee performance

H2 testing results prove work environment affects employee perfomance, t-values obtained was 2.483 with a significance level of $0.015 < 0.05$, which means to accept H_a and reject H_o . It has been stastically proven that work environment individually or partially has positive and significant

effect on employee performance – if work environment is high, thus performance in carrying out the obligations and duties will also be high, vice versa.

The effect of leadership style and work environment on employee performance

H3 testing results prove independent variables (leadership style and work environment) affect dependent variable (employee performance) marked by the R^2 value of 0.530 (between zero and one), which means 53.0 per cent of the variations that occur in employee performance can be predicted by the two independent variables (strong correlation). It has been statistically proven that leadership style and work environment individually or partially have positive and significant effect on employee performance – if independent variables (leadership style and work environment) are increasing, thus performance in carrying out the obligations and duties will also increase, and vice versa.

Conclusion

Of the three hypotheses, the following conclusions can now be drawn as follows:

- H1 test results prove that there is a positive and significant effect of leadership style on employee performance in The Financial and Development Supervisory Agency in North Sumatera Representative Office.
- H2 test results prove that there is a positive and significant effect of work environment on employee performance in The Financial and Development Supervisory Agency in North Sumatera Representative Office.
- H3 test results prove that there is a positive and significant effect simultaneously of the leadership style and work environment in The Financial and Development Supervisory Agency in North Sumatera Representative Office.

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The role of dynamic capability theory in improving handicrafts in SMEs Central Borneo

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ABSTRACT : The purpose of this research is to increase the income of handicraft businesses made by SMEs in Central Kalimantan, with testing product quality and mediating brand image in encouraging purchasing decisions. The research applies dynamic capability theory to synergize with the business environment which also strengthens the construction of research in the relationship product quality, brand image and purchasing decisions. The research method is quantitative research approach. The population and sample in this study were the handicraft community. The number of respondents is 77 people who are regular customers of SME handicraft products. The analytical tool used in this research is Partial Least Square with Structural Equation Modeling approach. The results of this study indicate that product quality, brand image mediation has a significant positive effect in improving purchasing decisions. The implication of the results is that the important qualities of products and brand image that drive purchasing decisions cannot be separated from dynamic capability theory, in an uncertain environment so that SMEs survive. Further research can adoption digital marketing variable on promotional tool relevant to current progress of the business environment.

Keywords: Product Quality, Brand Image, and Purchase Decision

I. Introduction

Indonesia is one of the developed countries that can be seen from the increasingly rapid technological developments, starting from the emergence of new products and new innovations (Christa & Kristinae, 2021). The tourism industry in Indonesia is supported by tourism potential. The very diverse tourism objects absorb many domestic and foreign tourists to visit it. The increasing number of tourist visits in Indonesia must also be balanced with an increase in important supporting facilities which are an important part of the tourism sector, such as local products or SMEs. Various kinds of handicrafts on offer such as souvenirs, snacks, batik cloth can be a tourist attraction. Product quality is a characteristic of a product or service to support its ability to satisfy consumers (Winarso, 2020). If marketers pay attention to product quality, even strengthened by advertising and reasonable prices, consumers will not think long about buying a product.

In strengthening the results, a strategy is needed in making sales innovations, one of which is brand image. Brand image can be a feature of a production so it must be made attractive and easy to remember / has an appeal. Local products should use different things such as product names that have product characteristics or the philosophy of the brand being sold (Malelak et al., 2021). The purchase decision is one of the stages of the overall mental process and other physical activities that occur in the buying process at a certain period and time and the fulfillment of certain needs or in other words is a series of stages taken by a consumer (Nugraheni et al., 2020). Brand image is the way people perceive the actual brand image. In order for the brand image to be embedded in the minds of consumers, marketers must demonstrate brand identity through

available means of communication and brand contact. Brand image is important for every company in winning local product business competition. Quality is a combination of traits and characteristics that determine the extent to which the output can meet the requirements of consumer needs or assess to what extent these characteristics and characteristics meet their needs (Dhewanto et al., 2021).

Central Kalimantan Province is one of the developing cities. Several oil palm plantation companies in the Central Kalimantan region generally have representative offices in Palangka Raya. Currently Palangka Raya is developing tourism. Tourism is now a commodity that is needed by almost every individual. Because by carrying out tourism activities, it can increase creativity, reduce work saturation, open insight into a culture, relax, know the related heritage of a nation, and do business based on local culture. Authentic products with an attractive philosophy and shape can attract tourists. So this is important in the world of tourism by strengthening the marketing field based on local culture with added value to small medium enterprise products.

This research is to support the increase in sales of SMEs products in three districts which are commodity business actors of local products such as souvenirs from rattan, latex, batik cloth and others, in Central Kalimantan Province based on dynamic capability theory which states that competitive advantage must be applied by various kinds of innovations both with resource management, business strategy and marketing activities. So that the implications of the results can be used as a reference in increasing SMEs income from purchasing decisions from product quality and brand image mediation.

2. Literature Review

2.1 Product Quality

Quality is a combination of traits and characteristics that determine the extent to which the output can meet the requirements of consumer needs or assess to what extent these characteristics and characteristics meet their needs. Nugraheni et al. (2020), while the product is anything that can be offered to the market for attention, ownership, use, or consumption that can satisfy the wants or needs of the wearer. The product does not only consist of tangible goods, but a broader product definition includes physical objects, services, activities, people, places, organizations, ideas, or a mixture of these things (Puspaningrum, 2020). Product quality is a combination of properties and characteristics that determine the extent to which the output can meet the prerequisites of customer needs or assess to what extent the properties and characteristics meet their needs (Dhewanto et al., 2021). There are eight indicators or dimensions of product quality that can be used as a framework for strategic planning and analysis. These indicators or dimensions are: performance is the operating characteristics and core products purchased. Features are additional characteristics or features that complement the basic benefits of a product. Features are optional or optional for consumers. Features can improve product quality if competitors don't have them. Reliability is a small possibility that it will be damaged or fail to use. Conformance to specifications is the extent to which the design and operating characteristics meet predetermined standards.

Furthermore, durability is the age of the product which is the amount of use of a product before the product is replaced or damaged. The longer the durability, of course, the more durable, durable products will be appreciated for higher quality than products that run out quickly or expire quickly. The serviceability of the product quality is determined on the basis of its ability to be

repaired more easily, quickly and competently. Products that can be repaired are certainly of higher quality than products that are not or are difficult to repair. Aesthetics is the product's appeal to the five senses. Perceived quality determination is the consumer's perception of the overall quality or superiority of a product. Based on dynamic capability theory, it is stated that the business strategy by strengthening the added value of quality and different products can survive in an uncertain business environment (Weaven et al., 2021). From previous empirical studies and research theory, the proposed hypothesis is: H1. Product Quality Significantly improves Purchase Decision.

2.2 Brand Image

López-Pérez et al., (2018), definition of a brand as a name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. Brand image is a description of consumer associations and beliefs about a particular brand. Brand image is the perception and belief that consumers hold, as reflected in associations or in consumers' memories. Brand is one of the important factors in marketing activities because the activity of introducing and offering products or services cannot be separated from the reliable brand (Elmadag et al., 2018).

Brand image is a perception and guidance used by consumers who do not have knowledge of a product and service so that consumers prefer products that are already well-known in the minds of the public rather than products that are not yet known by these consumers (Le et al., 2021). The company must have a brand that is different from its competitors, as well as a brand image that is embedded in the minds of customers. Because brand image is one of the first things that customers see before making a purchase or product selection. Dynamic capability theory states that the advantages of products with brands that are attached to usability or benefits, which are related to the function of a product/goods that can be utilized by consumers, can increase business income (Hernández-Linares et al., 2021). Thus, purchasing decisions can be influenced by brand image. Based on previous empirical studies, the proposed hypothesis is: H2. Product quality significantly improves brand image.

2.3 Purchase Decision

Harahap & Amanah (2020), purchase decisions are part of consumer behavior about how individuals, groups, and organizations choose, buy, use, and how goods, services, ideas or experiences to satisfy their needs and wants. The purchase decision is also a consumer decision that can be influenced by several factors such as financial economic factors, technology, politics, culture, product, price, location, promotion, physical evidence, people, and process (Novansa & Ali., 2017). In the purchase decision there are six stages, namely, starting with the need recognition stage, then to the second stage regarding information search and assessment of existing sources, proceed to the third stage of alternative evaluation, then to the fourth stage, namely making a decision to buy, the fifth stage of consumption and ending with the stages of consumer behavior after making a purchase.

There are five roles in a buying decision, namely: Initiative taking, individuals who have the initiative to purchase certain goods or who have a need or desire but do not have the authority to do it themselves. People who influence Individuals who influence the decision to buy either intentionally or unintentionally (Nofrizal et al., 2022). Product brands that have a good image of culture and characteristics can improve purchasing decisions. Consumers can be decision makers, individuals who decide whether to buy or not, what to buy, how to buy it, when and where to buy it. Buyers, individuals who make actual purchases, not only from quality products, but also from

the brand image inherent in the minds of consumers, from purchase satisfaction. Thus, consumers can buy products because of the brands they already know.

Purchasing decision is a consumer decision that is influenced by financial economy, technology, politics, culture, product, price, location, promotion, physical evidence, people and process (Kumar & Kapoor, 2017). Purchasing decision indicators consist of: product needs, product information search, product evaluation, product choice decisions. Dynamic capability theory is a theory which states that consumers will tend to choose products that are needed, attractive and satisfying products are within reach, consumers are likely to buy them. Based on previous empirical studies, the proposed hypothesis is: H3. Brand Image Significantly improve purchasing decisions.

3. Research conceptual framework

This study adopts dynamic capability theory in the hypothetical relationship, from the independent variable of product quality, the mediating variable of brand image and the dependent variable of purchasing decisions. To facilitate the interpretation of research results, the following research concept framework was developed.

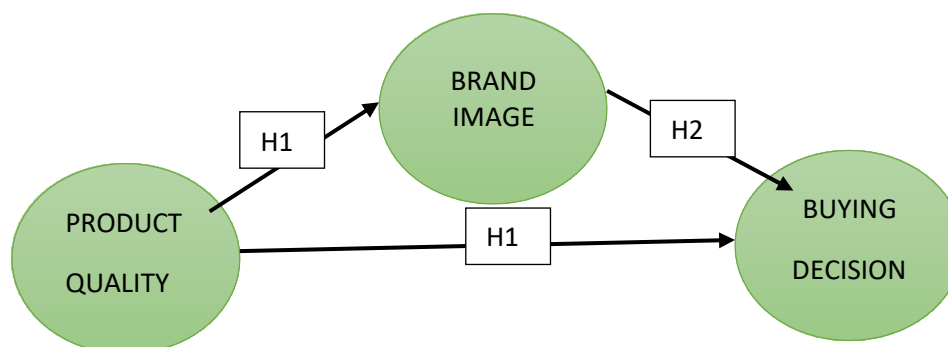


Figure 1. Research Concept Framework

4. Research Method

The type of research used is quantitative research. Quantitative research is a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative/statistical, with the aim of testing predetermined hypotheses (Bloomfield & Fisher, 2019). The sample is part of the number and characteristics possessed by a population. The sampling technique in this study is Non-Probability Sampling by taking sample members using Purposive Sampling, which is a technique to determine the number of samples from people or units encountered with certain considerations or criteria (Buelens et al., 2018), such as a minimum of 8 (eight) years of business establishment. The total sample is 77 SMEs business actors in Central Kalimantan Province from three districts (Kapuas Regency 25 respondents, Katingan Regency 25 respondents and Gunung Mas Regency 27 respondents).

5. Research Results

This study uses a quantitative analysis approach that adopts Partial Least Square (PLS). PLS is a powerful analytical method because it is not based on many assumptions (Hair et al.,

2017). The purpose of PLS is to predict the effect of X on Y and explain the theoretical between the two variables. The advantages of this PLS method are that the data does not have to have a multivariate normal distribution, the sample size does not have to be large, and PLS can not only be used to confirm theory, but can also be used to explain whether or not there is a relationship between latent variables. In accordance with the hypothesis that has been formulated, the following research test results.

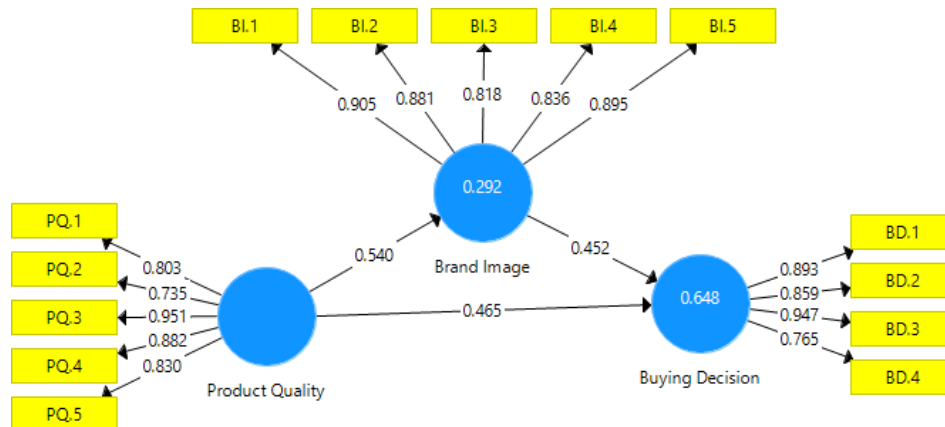


Figure 2. Results research
 Source: authors, 2022

Convergent validity of the measurement model can be seen from the correlation between the indicator scores and the variable scores. The indicator is considered valid if it has an AVE value above 0.5 or shows all outer loading dimensions of the variable having a loading value > 0.5. The results show that all indicators are valid. Furthermore, the reliability test, measuring the reliability of a construct with reflexive indicators can be seen from the composite reliability value. Composite reliability is the accepted limit value for the compositional reliability level is 0.7. The results show that all data are reliable from the results of the composite reliability value above 0.07 and Cronbach's alpha value is recommended above 0.7.

Table 1. Outer Loading

	Brand Image	Buying Decision	Product Quality
BD.1		0.893	
BD.2		0.859	
BD.3		0.947	
BD.4		0.765	
BI.1	0.905		
BI.2	0.881		
BI.3	0.818		
BI.4	0.836		
BI.5	0.895		
PQ.1			0.803
PQ.2			0.735
PQ.3			0.951
PQ.4			0.882
PQ.5			0.830

Source: authors, 2022

From table data 1, 2 states that all variables are said to be reliable because composite reliability is greater than 0.7 and Cronbach's alpha is above 0.7, the questionnaire can produce stable or constant measuring results.

Table 2. Construct Reliability and Validity

	Cronbach Alpha	Composite Reliability	AVE
Brand Image	0.917	0.938	0.753
Buying Decision	0.889	0.924	0.754
Product Quality	0.898	0.924	0.711

Source: authors, 2022

After testing the outer model, the next step is to test the inner model. Testing of the inner model or structural model is carried out to see the relationship between the construct, significance value and R-square of the research model. The R-square results show the effect of the Product Quality variable on the Buying Decision of 0.282 or 28.2%. while the effect of product quality on buying decisions is 0.639 or 63.9%. Here are the results of the analysis.

Table 3. R-square

	R-Square	R-Square Adjusted
Brand Image	0.292	0.282
Buying Decision	0.648	0.639

Source: authors, 2022

Path Coefficients is a value to indicate the direction of the relationship between product quality variables, brand image variables on buying decisions. Based on table 4. it can be concluded that the path coefficients value shows a positive direction because all values are above 0. Furthermore, the T-statistical value indicates that the relationship between exogenous and endogenous variables is significant. Table 4 shows that the T-statistical value is more than 1.96, so the T-statistical value is said to be significant. That is, all hypotheses are accepted.

Table 4. Path Coefficients and Results hypothesis test.

Hipotesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P-Value	Results
Product Quality → Buying Decisions	0.465	0.464	0.076	6.160	0.00	Accepted
Product Quality → Brand Image	0.540	0.548	0.073	7.369	0.00	Accepted
Brand Image → Buying Decisionas	0.452	0.457	0.114	3.982	0.00	Accepted

Source: Authors, 2022

The results show that the theory of dynamic capability in improving the strategy with product quality on purchasing decisions (Weaven et al., 2021), is significantly positive (p-value 0.00 < 0.05) and the relationship value is 46.5%. Furthermore, to maintain the brand image of dynamic

capability theory, the influence of product quality is significantly positive (p-value $0.00 < 0.05$) and the relationship value is 54%. Furthermore, the statement from the basic theory of dynamic capability on the influence of brand image on buying decision is significantly positive (p-value $0.00 < 0.05$) and the relationship value is 45.2%. These results indicate that improving purchasing decisions can be done by strengthening product quality and brand image on local products (SMEs). The theory of dynamic capability places more emphasis on quality unique products and brands based on culture are added values to increase business revenue.

5. Conclusion

The important role of local product business capabilities in Central Kalimantan Province must be supported by the ability to build competitive strategies that are able to manage product uniqueness in an innovative way. The form of innovation can be from product quality such as research results. It could also be from a culture-based brand image with added value product philosophy, so as to attract consumers to make purchasing decisions. The results of this study prove that dynamic capability theory is the basis for developing business methods in the midst of local business turbulence in an uncertain business environment that can be used as a reference in the field of marketing. In further research, you can add sales with digital marketing programs/methods.

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Comparison of Stock Prices of State-Owned Pharmaceutical Companies Before and After the Development of Corona (Covid-19) Vaccines

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Abstract: The COVID-19 pandemic has impacted all sectors in various parts halfway across the world, causing impediments to global and national economies. Further, the finance sector in the capital market caused investors are hesitant to invest during the pandemic. The development of COVID-19 vaccines is a sure-fire way to bounce the economy and the capital market back. This research aims to observe the stock value index of Kalbe Farma, Tbk, and Merck, Tbk earlier than and after the development of COVID-19 vaccines. This qualitative research uses event study methods with 24 days window period right before and also after the events. The data analysis technique used in this research is using the paired sample t-test. The results find the presence of the stock value of F121 sector has significant difference right before and after the announcement of vaccines development.

Keywords: Covid-19, Kalbe Farma Tbk, Merck Tbk, and Stock Value.

Introduction

Background

The Covid-19 disease outbreak (Coronavirus Disease 2019) is a disease caused by a new type of virus, namely Sars-Cov-2, which was first reported in Wuhan, China on December 31, 2019. The COVID-19 pandemic in Indonesia is part of the coronavirus disease pandemic. 2019 (COVID-19) which is around the world. The first positive case of COVID-19 in Indonesia was detected on March 2, 2020, when two people were confirmed to have contracted it from a Japanese citizen (Rebeca, 2020) (Malini, H., & Suwanto, E., 2021).

The spread of Covid-19 which became a pandemic had an impact on the economy of countries around the world, including in Indonesia. Not only in the health sector, but also in the business and investment sectors. The spread of Covid-19 which has become a pandemic has an impact on the economy of countries around the world. The impact of Covid-19 put a heavy pressure on the Indonesian economy in the first semester of 2020. On the one hand, efforts to limit mobility in Indonesia need to be carried out because since it was first declared that Indonesia has been infected since early March 2020, Covid-19 has spread very quickly throughout Indonesia. Until the end of December 2020, the number of positive cases of Covid-19 nationally reached 743,198 people with the number of deaths recorded at 22,138 people. But on the other hand, the Government's policy to reduce the spread of Covid-19 through the implementation of mobility restriction policies including the implementation of health protocols and PSBB in several areas has unavoidably reduced the economic activity of the community sharply. Economic growth slowed to 2.97% (YOY) in the first quarter of 2020 and contracted by 5.32% (YOY) in the second quarter of 2020. In addition, the spread of Covid-19 also affected the Jakarta Composite Index in 2020, as shown in the data in below

Tabel 1. Indikator Perekonomian Domestik

Komponen	2018	2019	2020			
			I	II	III	IV
Pertumbuhan Ekonomi (Persen, yoy)	5,17	5,02	2,97	-5,32	-3,49	
Konsumsi Rumah Tangga (Persen, yoy)	5,05	5,04	2,83	-5,52	-4,04	
Konsumsi Pemerintah (Persen, yoy)	4,8	3,25	3,75	-6,9	9,76	
PMTB (Persen, yoy)	6,67	4,45	1,7	-8,61	-6,48	
PMTB Bangunan (Persen, yoy)	5,45	5,37	2,76	-5,26	-5,6	
PMTB Non Bangunan (Persen, yoy)	10,31	1,8	-1,46	-18,62	-8,99	
Ekspor Barang dan Jasa (Persen, yoy)	6,48	-0,87	0,23	-11,68	-10,82	
Impor Barang dan Jasa (Persen, yoy)	12,04	-7,69	-2,18	-16,98	-21,86	
Inflasi IHK (Persen, yoy)	3,13	2,72	2,96	1,96	1,42	1,68
Inflasi Inti (Persen, yoy)	3,07	3,02	2,87	2,26	1,86	1,60
Inflasi Volatile Food (Persen, yoy)	3,39	4,3	6,48	2,32	0,55	3,62
Inflasi Administered Prices (Persen, yoy)	3,36	0,51	0,16	0,52	0,63	0,25
Neraca Pembayaran Indonesia						
Defisit Transaksi Berjalan (Persen PDB)	2,94	-2,71	-1,34	-1,2	0,36	
Transaksi Modal dan Finansial (miliar Dolar AS)	25,12	36,61	-3,07	10,63	1,04	
Overall Balance (miliar Dolar AS)	-7,13	4,68	-8,54	9,25	2,05	
Cadangan Devisa (miliar Dolar AS)	120,65	129,18	121	131,7	135,2	135,9
Nilai Tukar (rata-rata; Rp per Dolar AS)	14.246	14.139	14.219	14.893	14.669	14.339
IHSG (Indeks)	6.194,5	6.299,54	4.538,93	4.905,39	4.870,04	5.979,07
Yield SUN 10 Tahun (Persen)	7,98	7,04	7,85	7,18	6,93	5,86
Perbankan						
Kredit Total (Persen, yoy)	11,75	6,08	7,95	1,49	0,12	-2,41
CAR (akhir periode, persen)*	22,89	23,31	21,63	22,5	23,41	24,13
NPI (akhir periode, persen)	2,37	2,53	2,77	3,11	3,15	3,06
APBN						
Pajak (Persen PDB)	10,24	9,76	1,81	2,23	1,73	2,52**
Keseimbangan Primer (Persen PDB)	-0,08	-0,46	-0,01	-0,63	-2,23	-1,26**
Defisit APBN (Persen PDB)	-1,82	-2,20	-0,49	-1,17	-2,73	-1,78**

Keterangan: *s.d. November 2020; **Angka sementara

Sumber: BPS, Bank Indonesia, Bloomberg, Reuters, OJK, Kementerian Keuangan dan BEI

Image 1. Domestic Economic Indicators

Source : Laporan Perekonomian Indonesia 2020

Indonesia large-scale social restriction (LSSR) or as known as PSBB policy has prevented many companies from carrying out their normal operational activities. With this outbreak, investors withdraw their capital or sell shares, which causes the JCI to decline. As in the picture above, it can be seen in the third quarter of the JCI at 4,870.04, a decrease from the second quarter of 4,905.39. Investors panicked with this extraordinary event so they chose to sell the shares they bought (Malini, H., 2021).

President Joko Widodo announced a plan to develop a Covid-19 vaccine, namely on July 21, 2020. Without a corona vaccine, there will always be a risk of a new outbreak of the disease. The way to reduce the threat of the coronavirus is to make the population immune to the virus, so they cannot transmit it. The announcement provided a bright spot for the development of the capital market and the composite stock price index. After the announcement of the vaccine development, the composite stock price index increased. It can be seen from the picture above, in the fourth quarter the JCI experienced an increase compared to the JCI in the third quarter, to 5,979.07.

Problem Formulation

Is there any difference in stock prices of pharmaceutical companies on the Indonesia Stock Exchange between stock prices before and after the development of the covid-19 vaccine in Indonesia.

Research Purposes

This study aims to identify the impact of the planned Covid-19 vaccine development event in Indonesia on the reaction of pharmaceutical companies' stock prices on the Indonesia Stock Exchange before and after the development of the COVID-19 vaccine in Indonesia.

Theoretical Basis

Capital Market

The role of the capital market in economic globalization is increasingly important, especially in relation to capital flows and economic growth. The capital market is an indicator of a country's economic progress and supports the economy of the country concerned. The capital market has an important role for the economy of a country, especially in developed countries because the capital market performs two functions, namely first as a means for business funding or as a means for companies to obtain funds from the investor community. In this regard, the main function of the capital market itself is to accommodate the investment funds of both local and foreign investors and then channel the funds needed by issuers for the development and expansion of their business in the real sector. Investors have the opportunity to invest in companies or business sectors that are considered to have good and consistent financial fundamentals and have bright prospects in the future, while companies have the opportunity to develop and expand their business and capture every business opportunity that exists.

Grand Theory :Signaling Theory

Signaling theory or signaling theory is an action taken by the company's management that gives instructions to investors about how management views the company's prospects. This theory provides an explanation of the reasons why companies have the urge to submit or provide information related to the company's financial statements to external parties. The urge to submit or provide information related to financial statements to external parties is based on the existence of information asymmetry between company management and external parties (Bergh et al., 2014).

The company or company management has more information regarding the company's operations and future prospects of the company compared to external parties such as investors, creditors, underwriters and other users of information. Therefore, to respond to these problems and reduce the information asymmetry that occurs, the thing that can be done is to provide a signal to outsiders through the company's financial statements in which there is credible or trustworthy company financial information and will provide certainty regarding the prospects for sustainability the future of the company.

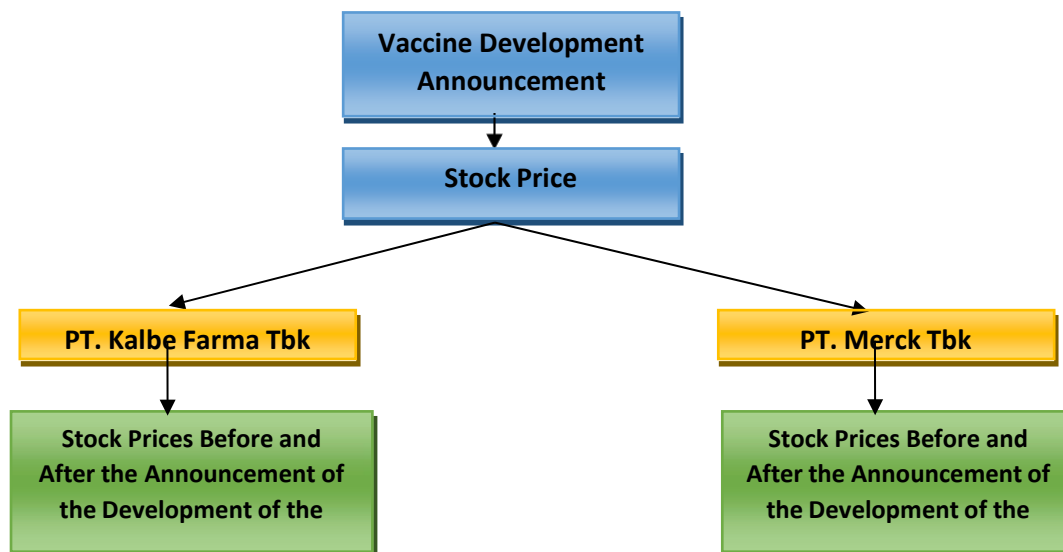
Stocks

Shares are proof of ownership of a company where the owner is also known as a shareholder. The form of a share is a piece of paper that explains that the owner of the paper is the owner of the company that issued the securities. Evidence that a person or party can be considered a shareholder is if they are already registered as shareholders in a book called the shareholder register (DPS). In general, the DPS is presented a few days before the General Meeting of Shareholders is held and each party can view the DPS. Evidence that a person is a shareholder can also be found on the back of the share sheet whether his name has been registered by the company (issuer) or not. (I Made Adnyana, 2020:32-33)

Stocks Return

The most basic thing that an investor must know is that there is risk that always follows the return (risk and return trade off). As for what is meant by return or what is often referred to as return, is the result obtained from an investment. This return can be in the form of realized returns / returns that have already occurred or expected returns that will occur in the future. This return is usually in the form of interest, capital gains and dividends. Meanwhile, risk is defined as the opportunity for not achieving one of the investment objectives due to uncertainty from time to time. This risk consists of two types, namely systematic risk (market risk) and unsystematic risk (risk arising from company policies). Between return and risk there is a unidirectional or linear relationship which indicates that the greater the risk borne, the greater the expected rate of return. (I Made Adnyana, 2020:2).

Thinking Framework and Hypothesis



The hypothesis in this study is that it is suspected that there are differences in the stock prices of Pharmaceutical Companies before and after the development of the corona virus vaccine (Covid-19) at PT Kalbe Farma Tbk and PT Merck Tbk.

Research Methods

Types of Research

This research is included in quantitative research. Quantitative research method is one type of research whose specifications are systematic, well-planned, and clearly structured from the beginning to the making of the research design. Another definition states that quantitative research is research that demands the use of numbers, starting from data collection, interpretation of the data, and the appearance of the results. Likewise, at the conclusion of the research, it would be better if it was accompanied by pictures, tables, graphs, or other displays (Sandu Siyoto, 2015:17).

Research Data

This study uses secondary data, namely data obtained from the Indonesia Stock Exchange website (<https://www.idx.co.id>), secondary data in question is stock price data of PT Kalbe Farma Tbk and PT Merck Tbk. The data used in this study are:

Stock price data of PT Kalbe Farma Tbk and PT Merck Tbk prior to the announcement of the development of the corona vaccine (t-24), the data only takes trading days on the Indonesia Stock Exchange (excluding holidays and holidays),

The stock price data of PT Kalbe Farma Tbk and PT Merck Tbk prior to the announcement of the development of the corona vaccine (t+24), the data only takes trading days on the Indonesia Stock Exchange (excluding holidays and holidays).

In inferential research, which uses a quantitative analysis approach (statistics), a prediction is needed regarding the answers to research questions formulated in the form of research hypotheses. Hypotheses are tentative answers to research questions. Therefore, the formulation of a hypothesis is very different from the formulation of a research question. The research hypothesis formulations, in turn, when tested using statistical methods, need to be translated in the form of symbolic statements. The symbols used in the formulation of statistical hypotheses are parameter symbols. Parameters are quantities that exist in the population.

The hypotheses in this study are:

- Ha - there is a difference in the stock price of Pharmaceutical Companies that have been listed on the stock exchange before and after the development of the corona virus vaccine (Covid-19)
- Ho – there is no difference in stock prices of Pharmaceutical Companies that have been listed on the stock exchange before and after the development of the corona virus vaccine (Covid-19)

Analysis Method

Normality Test

To test the normality of this study using the Kolmogorov Smirnov normality test. The Kolmogorov Smirnov Normality Test aims to determine the distribution of the data, whether it is normally distributed or not. The data is said to meet the assumption of normality or normal distribution if the significance value of the Kolmogorov-Smirnov test results is greater than 0.05 (Ghozali; 2013). When the normality test has been carried out and fulfilled (value of Asymp.sig (2-tailed) > 0.05).

Then it can be continued with the next test, namely the Paired Sample T-Test.

This study uses paired sample t-tests. This test was chosen to determine the difference between two pairs of samples. According to Singgih Santoso (2014; 265), the guide to decision making in the Paired Sample T-Test based on the significance value (Sig), the output results of SPSS are as follows:

If the value of Sig (2-tailed) < 0.05, then Ho is rejected and Ha is accepted.

On the other hand, if the value of Sig (2-tailed) > 0.05, then Ho is accepted and Ha is rejected. In this study, the data tested were stock prices before and after the announcement of the development of the corona vaccine in Indonesia. The basis for making decisions on the Paired Sample T-test is if:

sig value. (2-tailed) < 0.05 indicates a significant difference between the initial variable and the final variable (Ha). This shows that there is a significant effect on the difference in the treatment given to each variable, sig value. (2-tailed) > 0.05 indicates that there is no significant difference between the initial variable and the final variable (Ho). This shows that there is no significant effect on the difference in the treatment given to each variable.

Results and Discussion

Data Normality Test

The following are the results of the normality test data using the One-Sample Kolmogorov-Smirnov Test:

a. PT Kalbe Farma, Tbk

➔ NPar Tests

		Sebelum	Setelah
N		24	24
Normal Parameters ^{a,b}	Mean	1456.2500	1587.5000
	Std. Deviation	41.39549	29.45151
Most Extreme Differences	Absolute	.120	.142
	Positive	.120	.101
	Negative	-.089	-.142
Test Statistic		.120	.142
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS v22 data processing

b. PT Merck Tbk

NPar Tests

		Sebelum	Setelah
N		24	24
Normal Parameters ^{a,b}	Mean	2742.0833	3455.0000
	Std. Deviation	113.02094	225.54282
Most Extreme Differences	Absolute	.166	.134
	Positive	.152	.134
	Negative	-.166	-.103
Test Statistic		.166	.134
Asymp. Sig. (2-tailed)		.087 ^c	.200 ^{c,d}

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

The results of the data normality test using the One-Sample Kolmogorov-Smirnov Test show that: KALBE's stock price prior to the Vaccine Development Announcement had an Asymp value. Sig. (2-tailed) of 0.200 which indicates that the value is > 0.050 which means the data has a normal distribution. KALBE's share price after the Vaccine Development Announcement has an Asymp value. Sig. (2-tailed) of 0.200 which indicates that the value is > 0.050 which means the data has a normal distribution, The stock price of the MERCK before the Vaccine Development Announcement has an Asymp value. Sig. (2-tailed) of 0.087 which indicates that the value is > 0.050 which means the data has a normal distribution. The MERCK stock price after the Vaccine Development Announcement has an Asymp value. Sig. (2-tailed) of 0.200 which indicates that the value is > 0.050 which means the data has a normal distribution.

Paired Sample T-Test

The following are the results of the different test data using the Paired Sample t-Test:

a. PT Kalbe Farma, Tbk

➔ **T-Test**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Sebelum	1456.2500	24	41.39549	8.44982
Setelah	1587.5000	24	29.45151	6.01176

	N	Correlation	Sig.
Pair 1 Sebelum & Setelah	24	.479	.018

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Sebelum - Setelah	-131.25000	37.59770	7.67460	-147.12612	-115.37388	-17.102	23	.000

Source: SPSS v22 data processing

In the calculation of Paired sample statistics, the average value of stock prices before vaccine development is 1456.2500 and the average value of stock prices after vaccine development is 1587.500. The calculation results on the Paired samples Test show that the significance value is 0.000 < alpha (0.05) or indicates Ho is rejected and Ha is accepted, which means that the stock price of KALBE before the announcement of the vaccine development and the stock price of KALBE after the announcement of the development of

the vaccine there is a significant difference. The results of the calculations on the Paired samples Test show a mean value of -131.25000. This value shows the difference between the average stock price before vaccine development and the average stock price after vaccine development or $1456.2500-1587.000 = -131.25000$. Based on the results of the analysis, it can be seen that there is positive information content for investors, in the announcement of the development of the Covid-19 vaccine in Indonesia which caused the market to react with a significant difference in average before and after the event.

b. PT Merck Tbk

T-Test

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Sebelum	2742.0833	24	113.02094	23.07030
Setelah	3455.0000	24	225.54282	46.03874

	N	Correlation	Sig.
Pair 1 Sebelum & Setelah	24	-.828	.000

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Sebelum - Setelah	-712.91667	325.32899	66.40750	-850.29105	-575.54228	-10.735	23	.000

Sumber : Hasil olah data SPSS v22

In the calculation of Paired sample statistics, the average value of stock prices before vaccine development is 2742.0833 and the average value of stock prices after vaccine development is 3455,0000. The calculation results on the Paired samples Test show that the significance value is $0.000 < \alpha (0.05)$ or indicates H_0 is rejected and H_a is accepted, which means that there is a significant difference between MERCK's stock price before the announcement of vaccine development and MERCK's stock price after the announcement of vaccine development. The results of the calculation on the Paired samples Test showed a mean value of -712,91667. This value shows the difference between the average stock price before vaccine development and the average stock price after vaccine development or $2742.0833-3455,0000 = -712.91667$. Based on the results of the analysis, it can be seen that there is positive information content for investors, in the announcement of the development of the Covid-19 vaccine in Indonesia which caused the market to react with a significant difference in average before and after the event.

Conclusion and Suggestions

Conclusion

In mid-July 2020, after providing information on vaccine development, the share price of the health service provider sector increased. Of course, this is based on asking investors who are working on buying shares for the health sector. This positive sentiment led to the purchase of shares by investors. As it is known that the development of this vaccine is a pharmaceutical state-owned company PT Bio Farma (PERSERO) Tbk. The development of this vaccine also has a positive impact on the shares of the F121 sector, namely as a health service provider sector. Based on data processing and data analysis referring to the formulation of the problem and research objectives regarding the comparison of stock prices in pharmaceutical companies, in this study it can be concluded that there are significant differences in stock prices 24 days before and 24 days after the announcement of vaccine development in Indonesia at the company. pharmacy. This indicates that the announcement of the Covid-19 vaccine development plan in Indonesia has affected the stock price movements of pharmaceutical companies. This can be seen from the results of hypothesis testing with a significant value of $0.000 < 0.05$. This is reinforced by the results of hypothesis testing conducted by researchers, namely the paired sample t-test with the results of the probability values of all tested variables having values below 0.05 or below the test criteria.

Suggestions

Based on the conclusions described above, the authors can provide suggestions including:

1. Investors need to invest in companies that are more stable in their movements in order to avoid fluctuations until they wait for more conducive market conditions. Investors can choose money market mutual fund products whose movements are more stable and still grow positively during the Covid-19 pandemic.
2. For companies that have a high level of influence on the Covid-19 pandemic, the company must implement a good strategy and provide excellent service to the community to minimize the impact caused by the Covid-19 pandemic which resulted in decreased income and impacted stock prices. and stock,
3. It is important for an investor to pay attention to the price of a stock, because the stock price is a reflection of the company's performance. investors need to know what stock they are going to buy, don't buy a stock but don't know the performance of the stock. Thus, investors will have long endurance to hold certain stocks. Investors need to read the reports provided by the company, such as financial statements and annual reports. The COVID-19 pandemic has had an impact that investors need to anticipate. Investors are expected to be able and ready to digest and observe any information they receive. In order for the decision-making process to continue to prioritize rationality and not be influenced by the FOMO perspective,
4. Another thing that investors need to pay attention to is don't go into debt. In the midst of economic conditions that are haunted by the Covid-19 pandemic, stock performance is getting worse due to panic investors and selling a number of their portfolios, so that the JCI even slumped.
5. For further researchers to be able to develop this research by reconstructing the research model with other variables such as abnormal returns and company size and adding samples so that the research becomes more perfect.

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Effect of Profitability and Debt Ratio on Company Value Moderated by Size on TSE Companies

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Abstract: This research aims to determine the effect of profitability ratio and debt ratio on company value with the company size as a moderating variable. The data used is the secondary data from the financial statements of Machinery, First Section, and 156 companies in TSE. Sampling was taken by using the purposive sampling method, with 110 companies as research samples. The data was analyzed by using SPSS software version 22. The results show that both profitability ratio and debt ratio have a negative influence as a result on company value. The results also reveal the influence of profitability ratio on company value, in which company size acts as a Predictor Moderator. Meanwhile, on the effect of the debt ratio on company value, company size is a Quasi Moderator. Thus, the author suggests that further research should involve investor behavior factors and investment decisions on the effect of profitability on company value and try to discuss company size as an independent variable.

Keywords: profitability ratio, debt ratio, company value.

Introduction

Investor's main purpose in making investment is to make profit. Hoping to reclaim higher profit, the investment is done by paying some money or assets. Investment can be done through various investment instruments, such as through capital market or stock investment. It is done by trading company ownership rights or shares. However, no investor wants to lose from the share they invest in stock investment. This is the reason why an investor invests only in a company stock that is considered good by the investor. The investor's consideration is seen through company stock, which is called as company value or market ratio. A high company value indicates a high level of demand and a high share price, which also means a high valuation given by investor to the company's share. The investor's consideration is usually based on the analysis of financial data listed in the company financial report. After that the investor sees the company's performance through the financial ratio. Profitability ratio is one of the examples of several financial ratios discusses in this research. Profitability ratio is used to examine company ability in making profit. The higher the profitability ratio, the higher the profit generated by the company. Meanwhile, debt ratio shows the company ability to fulfill its obligations and debts. It shows the risks the investors have to face when investing in that company shares.

This research also discusses the size of company as additional factor in financial ratio. Company size reflects the size of the company based on certain factors, such as total sales. The total sales display the scales of company operation, so that the company is able to generate the occurring sales. In the capital market investment, investors transact with companies that have been listed on certain stock exchanges, Tokyo Stock Exchange (TSE) for instance. TSE as the biggest stock exchange in Japan offers stock investment opportunity that attracts the stock investors with relatively complete and organized information. Since then, the researcher decides to use TSE stock as the data source in this research. Furthermore, the object of this research is machinery industry

sector. Machinery industry is one of the industry subsectors which manufactures and maintains machines for other industry sectors. As one of the biggest industries in Japan with a total of 156 companies, it is expected to increase the collected data reliability. Moreover, to intensify the data reliability even further, First Section category which consists of the "best" companies with financially stable condition compare to other companies is chosen in market division. Because of that, research with title "The Effect of Profitability and Debt Ratio on Company Value Moderated by Size on TSE Companies" is written based on the background description.

Literature Review

Information Asymmetry

According to Stiglitz (2002: 469) in Connelly, et al. (2011: 42), information asymmetry occurs when "different people know different thing". Thus, the information recipient could potentially make a different decision from what it should be. Hence, the informant needs to give relevant and accurate clues or signals to the recipient.

Signaling Theory

Spence (1973) initially promoted Signaling Theory to explain how an informant gave certain signal as a clue to the recipient. Spence (2002), as quoted in Connelly, et al. (2011: 40), states the importance of signaling theory to reduce the information asymmetry for both sides. In accordance to the company financial status, the management will publish the financial reports periodically. Brigham and Houston (2018: 143) explain briefly in their book about how company financial status relates to stock prices and the valuation from investor later. They write:

"If the liquidity, asset management, debt management, and profitability ratios all look good, and if the investors think these ratios will continue to look good in the future, the market value ratios will be high; the stock price will be as high as can be expected; and management will be judge as having done a good job. "

This happens if the information consists of positive signals, then investors will assess the company prospects in the future. That way, investors' interest in the company shares will increase, followed by an increase in share prices. This causes a higher market ratio or company value.

Trade-Off Theory

Trade-Off Theory explains an optimal Capital Structure in discussing the correlation between capital structure and company value. The increasing amount of debt will increase the value of the company. Sudana (2011: 153) claims that the increasing value is the effect of bigger tax savings than bankruptcy costs on company value. This means that investors assess the performance of companies that are actively in debt with the hope that expansion and development will be carried out which will later be able to bring in bigger profits. However, the increase in the value of the company will only occur up to a certain point. When this amount of debt becomes too high, it will have an impact on the decrease in Company Value. This is because the impact of tax savings being smaller than the cost of bankruptcy on Company Value. Fahmi (2016: 72) says that the use of debt that is too high will endanger the company since the company will be included in Extreme Leverage category, namely/where the company is trapped in a high level of debt and it is difficult to release the debt burden. As the result, the amount of debt increases excessively which will only have negative impacts on investors' assessment of the company.

Moderating Variable

As stated by Ghozali (2018: 221), moderating variable is an independent variable which will strengthen or weaken the correlation between other variables with dependent variable. According to Sharma, et al. (1981) in Ghozali (2018: 222), there are several types of moderating variable. Firstly, Predictor Moderator as a moderating variable that relates to dependent variable (Y), but no correlation with independent variable (X). The second type is Homologizer Moderator, in which the moderating variable does not have relation with independent variable (X) or dependent variable (Y). The next type is Quasi Moderator, where moderating variable relates to both dependent variable (Y) and independent variable (X). Lastly, the Pure Moderator, where the moderating variable does not connect directly to dependent variable (Y), yet has an interaction with the independent variable (X).

Company Value

According to Fahmi (2015: 82), Company Value or Market Value Ratio is a ratio that describes the condition that occur in the market. Sawir (2005: 20) further explains that Company Value or Valuation Ratio is a measure that reflects the combined effect of the risk-return ration and payback ratio. This ratio discusses specifically how investors assess a company financial condition through the company stock price. The value of the company itself can be measured through several indicators. Price to Earnings Ratio (PER) is used for measuring the Company Value. Hartono (2017: 224) explains that PER is ratio that calculated the ratio of stock prices to earning, which shows how much investors value the price of shares to multiples of earnings.

Profitability Ratio

Harjito and Martono (2014: 53) claim that profitability ratio presents the company ability to benefit from the use of its capital. Fahmi (2016: 80) then explains that the higher the profitability ratio, the better it portrays the ability of high company profits. In this research, Return on Asset (ROA) is used for the profitability ratio. As described by Sudana (2011: 22), ROA displays the company ability in using all assets to generate profit after tax. The higher the ROA, the greater the company generated profit compared to the assets owned by the company.

In relation to signal theory, this Profitability Ratio can be used as a signal to investors to determine the company's ability, especially in generating profits. A high profitability ratio gives a good signal to investors because they are considered to have the ability to have good prospects in the future. Rosikah, et al. (2018) previously researched that the Profitability Ratio has a positive and significant effect on Company Value. This result is also in line with Yusuf (2014). Thus, it can be assumed that the Profitability Ratio has a positive and significant influence on the Company Value. The first hypothesis then will be:

H₁: Profitability Ratio has a positive and significant effect on Company Value.

Debt Ratio

As reported by Harjito and Martono (2014: 53), Debt Ratio or Financial Leverage Ratio measures the company ability to use funds from debt (loan). The greater a company debt ratio, the greater the use of funds from external debt (loan). Debt to Equity Ratio (DER) is used to measure debt ratio in this research. Harjito and Martono (2014: 59) explain that DER is a comparison between the total debt owned by the company with its own capital (equity). A high DER indicates that the company funding from external sources is quite large compared to funding originated from the company internal sources.

External funding that is too large can bring risks to the company. This is based on the Trade-Off Theory discussed, where the company faces the risk of loss and even bankruptcy. This happens because the company's debt is too high so that the company is not able to generate enough profit to cover the costs of its obligations. Brigham and Ehrhardt (2005: 547) explain further:

"Debtholders have a prior claim on the company's cash flows relative to shareholders who are entitled only to any residual cash flow after debtholders have been paid. The 'fixed' claim of the debtholders causes the 'residual' claim of the stockholders to become less certain, and this increases the cost of stock."

The amount of debt indicates the size of the portion that must be paid to the lender first, before investors. As a result, the portion of profits earned by investors tends to be lower. From this description, it can be seen that high debt is a negative signal for investors and reduces the value of the company. Chen and Chen (2011) support this claim with the result from their research that the effect of Debt ratio to Company Value is negative and significant. Because of that, the higher the debt ratio, the lower the company value expectedly. Thus, the second hypothesis is:

H₂: Debt Ratio has negative and significant effect on Company Value.

Company Size

According to Brigham and Houston (2010: 4), Company Size is a size of a company seen from total assets, total sales, total profits, and others. Dang and Li (2015: 3) then specify three major indicators widely used to measure the company size. One of them is natural logarithm from the company total annual sales as the Company Size variable.

Research done by Papadogonas (2007) found that big companies tend to have better profitability. This shows that company size has a positive influence of on company profitability. Based on these considerations, investors also view this as a good signal for the company's prospects in the future, thereby potentially increasing the Company's Value. The previous research conducted by Chen and Chen (2011) found that company size was able to moderate the effect of profitability ratios on company value. Thus, it can be assumed that the Company Size variable has the ability to moderate the effect of Profitability Ratios on Company Value. Thus, the third hypothesis is:

H₃: the Company Size is able to moderate and to influence Profitability Ratio to Company Value.

Ozkan's research (2001: 180) gives evidence that small companies tend to fall on financial distress (the state where the company's profits are not sufficient to meet the company's liability costs) and bankruptcy. Meanwhile, large companies, which are better in generating sales and profits, are able to meet their obligations better. That way, the state of the companies that are larger in size will reduce the risk brought by the amount of debt owned by the company. Investors also assess the companies that has better prospects and capabilities in the future. In line with it, Diantimala, et al. (2021) suggest in their research that the company size can moderate Debt Ratio effect on the Company Value. Therefore, it can be assumed that the Company Size variable has the ability to moderate the effect of Debt Ratio on Company Value. Thus, the fourth hypothesis is:

H₄: Company Size is able to moderate the Debt Ratio effect on Company Value.

Methods

The research was conducted on Machinery companies which were included in the First Section market division at TSE from 2016 to 2020. Data collection was carried out by obtaining secondary data from the published financial statements of TSE companies. The company population is 156 companies. From this population, purposive sampling was conducted with the following criteria: (1) the company conducted an IPO before the 2016 period began, (2) the company's shares were not delisted, (3) the financial statements were complete and audited, and (4) the company had an annual fiscal month that was consistent and the same as the JPX standard, i.e., March. From the sampling method, 110 companies were chosen as research samples. Tests were carried out using descriptive statistical analysis, multiple regression analysis, coefficient of determination, model feasibility test (F statistic), hypothesis testing (t statistic), and moderated regression analysis (Moderated Regression Analysis).

Findings

Descriptive Statistical Analysis

The table below presents the output for descriptive statistical analysis in this research data:

Table 1. **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Company Value	550	-236.8933	2449.8707	26.871220	134.3708550
Profitability Ratio	550	-.2918	.1450	.033501	.0420379
Debt Value	550	-10.1461	9.4682	.904228	1.0592216
Company Size	550	22.5846	29.0385	24.971275	1.3474611
Valid N (listwise)	550				

Source: Processed Data from SPSS 22, 2022

Based on Table 1 above, the amount of data studied for each variable is 550 pieces. In the Company Value variable (Y), the lowest value is negative 236.8933, and the highest value is 2449.8707. The mean value of the Y variable data is about 26.871220, with a standard deviation of about 134.3708550. In the Profitability Ratio (X1) variable, the lowest value is negative 0.2918 or 29.18 percent, and the highest value is 0.1450 or 14.50 percent. The mean value of the data variable X1 is about 0.033501 or 3.35 percent, with a standard deviation of about 0.0420379 or 4.20 percent. In the Debt Ratio (X2) variable, the lowest value is negative 10.1461 or 1014.61 percent, with the highest value of 9.4682 or 946.82 percent. The mean value of the data variable X2 is about 0.904228 or 90.42 percent, with a standard deviation of about 1.0592216 or 105.92 percent. In the Company Size variable (Z), the lowest value is 22.5846, with the highest value of 29.0385. The mean value of the Z variable data is about 24.971275, with a standard deviation of about 1.3474611.

The Effect of Profitability Ratios and Debt Ratios on Company Value

The effect of profitability ratios and debt ratios on company value output as follows:

Table 2. Regression Analysis of Profitability Ratio and Debt Ratio to Company Value

Model		Unstandardized Coefficients (B)	t	Sig.	Adjusted Square	R F
1	(Constant)	.240	2.226	.026	.555	309.804
	LN_X1	-.715	-24.676	.000		
	LN_X2	-.401	-12.403	.000		

a. Dependent Variable: LN_Y

Source: Processed Data from SPSS 22, 2022

Based on table 2, a regression equation can be formed for the regression model at this step as follows:

$$Y=0.240-0.715 X_1-0.401 X_2+e$$

From the regression equation that has been formed above, several things can be explained. The constant value in the regression model was obtained at 0.240. That is, if there is no variable value X1 (Profitability Ratio) and X2 (Debt Ratio), or equal to zero, then the value of the Y variable (Company Value) is 0.240. The regression coefficient for the X1 variable is negative 0.715. That is, for every increase in the X1 variable by one or one hundred percent, the Y variable will decrease by 0.715. The regression coefficient for the X2 variable is negative 0.401. That is, for every increase in the X2 variable by one or one hundred percent, the Y variable will decrease by 0.401. The error value represents the influence of other factors outside the regression model that also affect the value of the Y variable.

Based on the result of Table 2, the value of the Adjusted R Square Coefficient of Determination is 0.555 or 55.5 percent. 55.5 percent of the variation of the dependent variable Y can be explained by variations of the independent variables X1 and X2 used in this research, or other factors of the research model outside the research variables influence 44.5 percent.

The regression model at this step has 496 pieces of data (N) and two independent variables involved (k), so the F-table value is around 3.860. From Table 2, it can be seen that the F-count for the regression model in this study is 309.804. Thus, the calculated F value is greater than the F-table value ($309.804 > 3.860$). In addition, the significance value of the F Statistical Test (Sig.) is also less than the five percent alpha value ($0.000 < 0.05$). From this description, it can be concluded that the regression model in this study is declared feasible. Research can be continued to carry out hypothesis testing or partial T test.

The obtained t-table is approximately ± 1.965 with the number of data (N) 496 pieces and the number of independent variables involved (k) two pieces. The following explanation explain the detail of the discussion of the t-statistical test of each independent variable. In the first detail, variable X1 has a t value of negative 24,676 with a significance (Sig.) of zero. The t value of the X1 variable is already outside the H0 acceptance area ($-24,676 < -1,965$). The significance value (Sig.) of the X1 variable is smaller than the five percent alpha value ($0.000 < 0.05$). Thus, it can be concluded that the variable X1 has a negative effect on variable Y. The second detail, Variable X2 has a t-count value (t) of negative 12,403 and a significance value (Sig.) of zero. The t value of the X2 variable is already outside the H0 acceptance area ($12,403 > 1,965$). The significance value (Sig.) of the X2 variable is smaller than the five percent alpha value ($0.000 < 0.05$). Thus, it can be concluded that the X2 variable has a negative effect on the Y variable.

Company Size Ability to Moderate the Effect of Profitability Ratios on Company Value

Here is the summary of company size moderation test output on the effect of profitability ratio on company value:

Table 3. Moderated Regression Analysis of Company Size on the Effect of Profitability Ratio to Company Value

Model		Unstandardized Coefficients (B)	t	Sig.	Adjusted Square	R F
1	(Constant)	.899	8.359	.000	.419	355.705
	LN_X1	-.578	-18.860	.000		
2	(Constant)	-2.825	-1.753	.080	.423	182.103
	LN_X1	-.574	-18.764	.000		
	LN_Z	1.162	2.315	.021		
3	(Constant)	-2.846	-1.749	.081	.421	121.162
	LN_X1	-.575	-17.643	.000		
	LN_Z	1.168	2.310	.021		
	LN_X1.LN_Z	.049	.099	.921		

a. Dependent Variable: LN_Y

Source: Processed Data from SPSS 22, 2022

The output of the Coefficient of Determination Test for each equation in the moderation test at this step is visible in Table 3. For the first equation (1), it is known that the Adjusted R Square value is 0.417 or 41.7 percent. The first equation explains 41.7 percent of the variation in the dependent variable Y, or other factors outside the research variables of the research model influence the remaining 58.3 percent. In the second equation (2) output, the Adjusted R Square value is 0.423 or 42.3 percent. The first equation explains 42.3 percent of the variation in the dependent variable Y, or other factors outside the research variables of the research model have influenced 57.7 percent. In the third equation (3), the Adjusted R Square value is 0.421 or 42.1 percent. This first equation explains that 42.1 percent of the variation in the dependent variable Y, or other factors outside the research variables of the research model influence the remaining 57.9 percent.

The output of the F Statistics test from each equation in the moderation test at this stage is evident in Table 3. The F-count value of the first equation (1) is 355,705, the second equation (2) is 182.103, and the third equation (3) is 121.162. The F-count value is greater than the F-table value (> 3.860). In addition, the significance value of the F Statistical Test (Sig.) is the same from each equation, which is 0.000. This value is below the Alpha value of five percent ($0.000 < 0.05$). Thus, every equation in this moderation test is declared feasible.

In Table 3 of the output, a summary of the regression output is as follows:

- a. $Y = 0.899 - 0.578 X1 + e$
 Sig. (0.000) (0.000)
- b. $Y = -2.825 - 0.574 X1 + 1.162 Z + e$
 Sig. (0.080) (0.000) (0.021)
- c. $Y = -2.846 - 0.575 X1 + 1.168 Z + 0.049 X1Z + e$
 Sig. (0.081) (0.000) (0.021) (0.921)

By comparing the three equations above, the significance value (Sig.) 2 in the third equation (3) is less than the alpha value ($0.021 < 0.05$), meaning that the value of 2 has a significant effect. While the significance value (Sig.) 3 in the third equation (3) is more than the alpha value ($0.921 > 0.05$), meaning that the value of 3 has no significant effect. From this analysis, the Company Size variable is not a Quasi Moderator moderating variable but a Predictor Moderator.

Company Size Ability to Moderate the Effect of Profitability Ratios on Company Value

Here is a summary of the output of company size moderation testing on the effect of the debt ratio on company value.

Table 4. **Moderated Regression Analysis of Company Size on the Effect of Debt Ratio to Company Value**

Model		Unstandardized Coefficients (B)	t	Sig.	Adjusted R Square	F
1	(Constant)	2.816	.041	.000	.008	4.803
	LN_X2	-.098	.045	.029		
2	(Constant)	-4.075	2.145	.058	.026	7.608
	LN_X2	-.128	.045	.005		
	LN_Z	2.137	.665	.001		
3	(Constant)	-3.133	2.160	.148	.038	7.577
	LN_X2	-.138	.045	.002		
	LN_Z	1.838	.670	.006		
	LN_X2.LN_Z	1.882	.696	.007		

a. Dependent Variable: LN_Y

Source: Processed Data from SPSS 22, 2022

The output of the Coefficient of Determination Test for each equation in the moderation test at this step is evident in Table 4. For the first equation (1), the Adjusted R Square value is 0.008 or 0.8 percent. The first equation can explain the 0.8 percent variation in the dependent variable Y, or other factors outside the research variables of the research model influence 99.2 percent. In the second equation (2) output, the Adjusted R Square value is 0.026 or 2.6 percent. The first equation can clarify the 2.6 percent variation in the dependent variable Y, or other factors outside the research variables of the research model influence 97.4 percent. In the third equation (3), the Adjusted R Square value is 0.038 or 3.8 percent. The first equation explains 3.8 percent of the variation in the dependent variable Y, or other factors outside the research variables of the research model affect 96.2 percent.

From Table 4 above, the F-count value of the first equation (1) is 4.803, the second equation (2) is 7.608, and the third equation (3) is 7.577. The F-count value is greater than the F-table value (> 3.860). In addition, it is also known that the significance value of the F Statistical Test (Sig.) of each equation, with the first equation (1) being 0.029, the second equation (2) being 0.001, and the third equation (3) being 0.000. This value is below the Alpha value of five percent (< 0.05). In conclusion, every equation in this moderation test is feasible.

Here is a summary of the regression output:

- a. $Y = 2.816 - 0.098 X_2 + e$
 Sig. (0.000) (0.029)
- b. $Y = -4.075 - 0.128 X_2 + 2.137 Z + e$
 Sig. (0.058) (0.005) (0.001)
- c. $Y = -3.133 - 0.138 X_2 + 1.838 Z + 1.882 X_2Z + e$
 Sig. (0.148) (0.002) (0.006) (0.007)

From the three equations above, the significance value of β_2 is less than the alpha value of five percent ($0.006 < 0.05$), meaning that the value of β_2 has a significant effect. The same thing applies to the value of β_3 , which has a value below the alpha value of five percent ($0.007 < 0.05$), meaning that the value of β_3 has a significant effect. From this analysis, the Company Size variable is a Quasi Moderator moderating variable.

Conclusion

To conclude the research, the results are: (1) profitability ratio harmed company value; (2) debt ratio harmed company value; (3) company size moderated the effect of profitability ratios on company value as a moderator predictor; (4) company size was able to moderate the effect of profitability ratios on company value as a quasi-moderator. This research is limited to companies listed on TSE, First Section division, and Machinery sector from 2016 to 2020. This research also uses variables company value, profitability ratio, debt ratio, and company size.

The author suggests discussing further the influence of these investor behavior factors and investment decision-making with company value. In addition, the company size variable is indicated to act as an independent variable, not as a moderating variable.

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THE EFFECT OF BRAND IMAGE, COMPETITIVE PRICE, AND PRODUCT QUALITY ON THE DECISION TO RESELLING THE ASOKA PAINT IN PT TRI KARYA KHATULISTIWA

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Abstract: This study aims to find out the cause of the decrease in sales of Asoka paint products on the decision of reselling the products at PT Tri Karya Khatulistiwa. Furthermore, this study was conducted to discover the consumers respond to the brand image, the setting price, and the product quality of Asoka paint that make them want to resell the product. The form of this study is causality research. The population are 78 shop owners in Pontianak which was sampled based on census method. Data collection techniques are through questionnaires and interviews. This study uses SPSS (Statistical Product and Service Solution) program version 22 to help counting the results. Based on the test results (f test), it shows that the variable brand image, competitive price and product quality affect the decision to resell. The results of the partial test (t test) reveal that brand image and product quality significantly influence the decision to resell.

Keywords: Brand Image, Competitive Price, Product Quality, and Resell Decision

Introduction

House is a place where people reside that is always the most comfortable place to live. Everyone has a dream house with the chosen design of the room, the choice of furniture to the desire color in every room in the house. In terms of choosing a paint to color the room, the number of paint products with various brands that are marketed to the public makes consumers become more careful to determine which brand they want to use to decorate their homes as it is known that there are many paint brands such as Asoka, No Drop, Corulux, Nippon Paint, Mowilex, and so on. One of the distributor companies in Pontianak is PT Tri Karya Khatulistiwa which is the distributor of Asoka paint products. With many brands circulating in the community, companies compete with each other to create the best products with good price offers in order to attract consumers to make decisions to resell those products. PT Tri Karya Khatulistiwa must struggle to maintain its products in the market so that the company can still compete with competitors.

Every company engaged in the same field will continue to make attractive offers for consumers and be more careful in choosing products. Things that are considered by consumers are the image of the product and the price set on the product which will be the considerations in addition to brand image. Price is often associated with the brand image of a product. In addition, consumers will choose prices that match the quality, expectations, and are cheaper than other products. Price with quality is always related to reselling where consumers will see whether the price is in accordance with the quality benefits that will be provided or not. The quality that consumers expect is a product that is produced with quality raw materials for good product. Good quality will also form a good brand image in the eyes of the public. This is a challenge for the distributor company, PT Tri Karya Khatulistiwa, to form a brand image that offers prices that are comparable to the quality of products produced by its competitors in order to ease the products to be reselled.

Literature review

Brand Image

Brands created by companies to identify goods or services is produced and sold so that the goods or services are different from other competitors and can make it easier for consumers to recognize the product when it is on the market. The brand is an asset of the company because it can be an identifier. The appearance of a product whose goods or services can be tangible, such as names, logos, terms, signs, symbols, designs and others, make it easier for consumers to recognize products or services when marketed to consumers (Kotler & Keller, 2012: 241; Assauri, 2017: 204; Chakti, 2019: 3). Therefore, companies must maintain brands for products or services properly after formed because brands can affect the success of a business.

There are three concepts in brand image, namely: store image, product image, and corporate image (Ferrinadewi, 2008: 166-167). Besides, there are three concepts of brand image that make it more varied, that is *brand association* as the act of consumers creating associations based on their understanding of the brand and knowledge that is factual as well as from experience and emotion, *brand value* as an action of the consumers in determining the brand of action based on the perceptions and values they believe in, and *brand positioning* as the consumer's perception of the quality of the brand from the consumer's perception and this perception is used to evaluate the brand chosen (p. 167).

The brand image of a product will always be remembered by the consumers, therefore it can be a factor that helps consumers in deciding to buy and resells it. If the brand image of the product is good, consumers will not hesitate to make purchases, recommend to others and will possibly increase the number of purchases when they repurchase as well as resell the product. A good brand image must be maintained so that the product can survive in the market.

Based on the study on the brand image variable, the first hypothesis in this study is:

H₁ : Brand Image affects the decision to resell

Competitive price

Price is a measure of a product for consumers and producers to decide for buying goods and services. Price is the amount of money that is exchanged or paid to get a product or service and the only element of the marketing mix that can provide income for the company (Tjiptono & Chandra, 2017: 369-370; Assauri, 2015: 223; Musfar, 2020: 13). Price is the value of an item expressed in money that consumers are willing to spend as a sacrifice to get an item or service. Prices are always related to the quality of products expected by consumers and prices are equal to or cheaper than competitors. This is always a consideration for consumers. Competitive prices are the actions of the company in setting prices by providing the same or lower value than competitors where the price is issued by consumers to get an item or service. Consumers will choose products that are more effective and efficient to meet their needs, both in terms of value and the costs that will be incurred to get the product that is compatible with their expectations because they do not want to spend money for useless thing or in unexpected. Price according to quality is the expectation of consumers as consumers want to spend money to get what they want in accordance with the expected benefits.

Based on the study on the competitive price variable, the second hypothesis in this study is:

H₂ : Competitive prices affect the decision to resell.

Product quality

Product quality is a characteristic of a product that provides benefits to consumers (Kotler & Armstrong, 2018: 249). Product quality is a product that is produced by a company in good quality and very useful in order to meet the needs and desires of consumers. Good product quality must have these dimensions, namely performance, reliability, conformance, features, service ability, durability, aesthetics, and perceived quality (Tannady, 2015: 6-7; Tjiptono & Chandra, 2017: 88). Product quality must be considered by company managers because if the company creates a product with poor quality then the product will be difficult to market. The product produced with good quality that can meet the needs and desires of consumers will be easier to market and consumers will feel happy after buying because they have benefited from the product they have chosen. They will recommend to others to make a purchase as they have received benefits of the product.

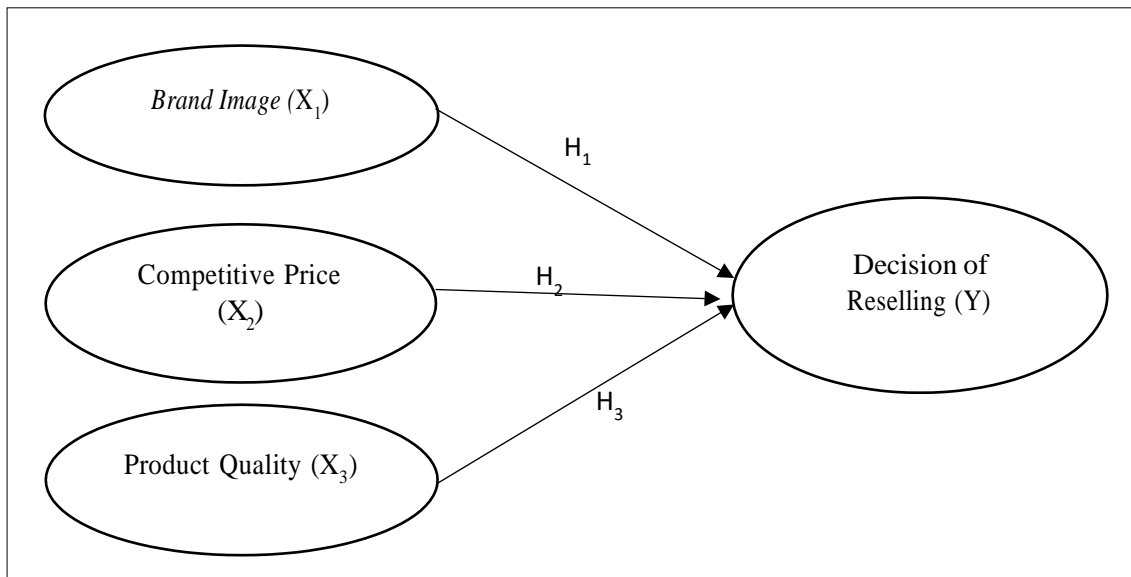
H₃ : Product quality affects the decision to resell.

Resell decision

The decision to resell is a sales process that has the aim of generating profits for the company. Selling is a process of approaching, presenting and demonstrating products and overcoming resistance from consumers in selling products to consumers (Hermawan, 2012: 109). Reselling is something that happens in the business market where all organizations buy goods to be used in the production of goods or sell, rent, and supply them to other parties (Abdullah & Tantri, 2018: 137). The decision to resell by the company is always related to profit. High demand from consumers will also make distributors sell more products. Reselling a product is not easy because if the brand image is not good, the product will be very difficult to resell. The company has three main objectives in reselling, namely achieving maximum sales volume, getting maximum profit, and supporting company growth (Swastha & Irawan, 2008: 404).

Soco has some characteristics that must be possessed by a salesperson or sales, which are assisting consumers in making decisions, assisting consumers in meeting the needs they need, offering products that will meet customer needs, providing information about responsive products and services, avoiding deceptive tactics or manipulate, and avoid giving high pressure to the consumer (Thomas et al., 2014). Companies resell products in order to get maximum profit and fullfill the consumers' needs. Therefore, brand image, competitive price, and product quality are believed to influence the decision to resell a product. The following is the framework of thinking in this research which can be seen in Figure 1 below :

Figure 1. Thinking Framework



Source: Results of Previous Studies, 2022

Previous research conducted by Darmawan and Widodo in 2019 stated that green brand image has a positive and significant impact simultaneously on purchase decisions. The past research conducted by Deisy et al. in 2018 stated that price had no effect on repurchase interest. From the former research conducted by Jasmani in 2018, it was stated that product quality had a positive and significant effect on purchasing decisions.

Research methods

The research method used in this research is causality research to determine the effect of brand image, competitive price, and product quality on the decision to resell. The data collection techniques used for this research are interviews and questionnaires. The population used in this study were the workshop shop owners in Pontianak with 78 respondents as the sample. The sampling technique used the census method with sampling based on existing provisions. Rating scale is used in this study and the data will be analyzed using SPSS version 22 computer assistance.

Discussion

The company has a goal to get the maximum profit from the number of product sales, so the company must be able to see the opportunities that exist in the community. Companies must have professional salespeople so the products offered will attract consumers to buy and even be able to resell. Customers who decide to resell the product are also an opportunity for the company to get maximum profit. In this study, the population is all industrial customers. The population of 80 respondents are workshops located in Pontianak who often makes purchases, then the buyers will decide which product that they want to resell. The author used a method for interviewing and filling out a questionnaire consisting of a number of statement items which would be filled out by respondents. The author used this method in order to collect the information obtained from respondents about the brand image, the setting price and the quality of the product. However, at the time of data collection, only 78 of 80 data were retrieved because some respondents did not answer the questions in the questionnaire completely, so they had to be eliminated and could not be used in the study.

The following are the results obtained by author from collecting questionnaires that had been filled out by respondents in this study using the criteria (three-box method). The criteria used in this study is the Rating Scale criteria with a scale of 1-10 with the following explanation: a score of 1.00 – 40 is defined as a low perception; a score of 40.01 – 70 is defined as a moderate perception and a score of 70.01 – 100 is defined as a high perception (Ferdinand, 2014: 232). The following are the results of respondents' answers in this study can be seen in the table below, as Table 1.

Table 1. Respondents' Answer Results

Indicator	Weight Answer	Index Answer (%)	Average
Brand image (X ₁)			
1. Brand Association	614	61.40	66.33
2. Brand Value	647	64.70	
3. Brand Positioning	691	69.10	
4. Brand Positioning	701	70,10	
Conclusion: The respondents averagely give a moderate perception of the brand image variable			
Competitive price (X ₂)			
1. Price according to quality	633	63.30	64.03
2. Price is as expected			
3. Cheaper price than competitors	646	64.60	
	642	64.20	
Conclusion: The respondents averagely give a moderate perception of the competitive price variable			
Product Quality (X ₃)			
1. Quality raw materials	644	64.40	64.93
2. Durability	647	64.70	
3. Easy to use	650	65,50	
4. Not easily broken	656	65,60	
Conclusion: The respondents averagely give a moderate perception of the product quality variable			
Resell Decision (Y)			
1. Selling in large quantities	643	64.30	65.18
2. Always selling products			
3. Always offer products	653	65,30	
4. Sales priority	644	64.40	
	667	66,70	
Conclusion: The respondents averagely give a moderate perception of the reselling variable			

Source: Processed data, 2022

Table 1 shows the respondents' answers to the brand image variable that gave a moderate perception. The findings reveal that the respondents think that the company is lacking in providing product information to consumers. The company must often participate in events so the product's brand image can be embedded in the minds of consumers and provide colors that follow the trend that attract consumers to resell the product for a profit. According to the findings, respondents gave a moderate response to the competitive price variable, so the company must conduct a survey for applying the price according to expectations with the quality provided, and can offer attractive promotions. The findings show that respondents also gave a moderate response related the

product quality of Asoka paint, so it can be said that the company must improve product quality by using quality materials without using hazardous materials and renewing cans that are not easily damaged as well as creating paint with leak-proof protection and anti-fungal.

Tabel 2. Statistical Test Result

Validity Test X _{1.1} = 0.000 X _{1.2} = 0.000 X _{1.3} = 0.000 X _{1.4} = 0.000	X _{2.1} = 0.000 X _{2.2} = 0.000 X _{2.3} = 0.000	X _{3.1} = 0.000 X _{3.2} = 0.000 X _{3.3} = 0.000 X _{3.4} = 0.000	Y _{1.1} = 0.000 Y _{1.2} = 0.000 Y _{1.3} = 0.000 Y _{1.4} = 0.000
Reliability Test X _{1.1} = 0.765 X _{1.2} = 0.806 X _{1.3} = 0.798 X _{1.4} = 0.800	X _{2.1} = 0.803 X _{2.2} = 0.799 X _{2.3} = 0.764	X _{3.1} = 0.785 X _{3.2} = 0.795 X _{3.3} = 0.796 X _{3.4} = 0.782	Y _{1.1} = 0.811 Y _{1.2} = 0.803 Y _{1.3} = 0.791 Y _{1.4} = 0.805
Normality Test Kolmogorov Test-Smirnov test (KS test or KS test)			0.200
Multicollinearity Test Tolerance VIF	X ₁ = 0.636 X ₁ = 1.573	X ₂ = 0.584 X ₂ = 1.711	X ₃ = 0.604 X ₃ = 1.657
Heteroscedasticity Test	X ₁ = 0.060	X ₂ = 0,677	X ₃ = 0.874
Autocorrelation Test	1,713 < 2.262 < 2,287		(DU < DW < 4-DU)
Correlation Test	X ₁ = 0,000	X ₂ = 0,000	X ₃ = 0,000
Coefficient of Determination Test (R²)	R Square (%) = 0.632 or 63.2%		
Multiple Linear Regression Test	X ₁ = 0.311 ; X ₂ = 0.090 ; X ₃ = 0.592		
F test	F count = 42,314		Sig < 0.05 = 0.000
t test	X ₁ = 0.636 Sig = 0.000	X ₂ = 0.584 Sig = 0.547	X ₃ = 0.584 Sig = 0.000

Source: Processed data, 2022

Based on table 2 above, the results of the validity test and the results of the reliability test are in accordance with the provisions. The results of the classical assumption test consisting of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test are in accordance with the provisions of hypotheses 1, 2, and 3 that are accepted. The coefficient of determination test (R²) obtained 63.2%. This indicates that brand image, competitive price, and product quality affect the decision to resell, while the remaining 36.8 percent is influenced by other variables. The results of the multiple linear regression test show that the quality of the product most influences the decision to resell. The result of the calculated f test is 42.314, which is greater than the F table, which is 2.73 and the significance is 0.000 0.05. The t-test results show that the competitive price variable has no effect on the decision to resell, so the second hypothesis is rejected.

The results of this study indicate that the competitive price variable has no effect on the decision to resell. The results of this hypothesis are supported by previous research conducted by Deisy et al. in 2018 where the competitive price variable also has no effect on purchasing decisions due to the increasing number of mobile phone products sold by companies that produce cellphones because consumers do not consider price as a factor in making purchases. Research conducted by Safitri in 2020 reveals the competitive price variable also has no effect on repurchase interest at Lazada because consumers think more about brand image and service quality factors than price. Research conducted by Nasution et al. in 2019 shows that the competitive price variable that does not influence on purchasing decisions for the needs that are not influenced by price.

Therefore, it can be concluded that the price is not the main factor that influences consumers' decisions to resell products because industrial customers prioritize the quality factor of the paint

product rather than thinking about the price of the product that the price not too thought about by industrial customers by adding a brand or brand image. The image of a product that is already good has begun to be embedded in the minds of consumers. Regarding this decorative paint, it will much easier for industrial customers to buy and not hesitate to resell the product in the market because good quality product will always lead to demand from the consumers that are always looking for the needs in renovating their homes, in decorating the walls of their homes or offices more attractive.

Conclusion

Based on the analysis result for decision to resell Asoka paint, which can be seen from the three variables as brand image, competitive price, and product quality, it can be concluded that the brand image and product quality variables affect the decision to resell while competitive price does not affect it as well as for the results of the managerial implications. The results are obtained based on the theory used in this study so it is concluded that the company must continue to maintain the brand image of the product properly, so the people will not hesitate to buy it and to improve the brand image which helps customers who decide to resell products by company to be easier to sell the already well-known products.

The quality of the product must always be maintained using quality materials so the product will not be damaged too early, such as easy to fade, dry quickly, difficult to use, damaged easily, and the unsuitable colors offered to consumers. By keeping the quality of raw materials, the colors will stay good. Then, the colors produced must also follow the trends, so the colors produced will be sought by consumers as they need. The various colors produced will increase the interest of consumers to buy new colors.

The author recommends that the company must participate in events or become event sponsors to make Asoka paint products more familiar because before making purchases, the consumers often look for information about the products they need with no issues, consumers will not hesitate to make a purchase. The company must also keep the quality of raw materials, so that the paint products are produced well. That way, people will not feel disappointed with the colors produced. Also, the company should update the color of Asoka paint by following the trends that will attract customers to resell the product.

For the price of the company's products, although it has no influence on the decision to resell, the company should continue to conduct price surveys in the community setting the price of product in accordance with the quality of the product provided. The price is same as the expectations of the community both from the benefits they receive and the money they spent to fulfill their needs.

For further research, this study cannot describe all the factors that can increase the decision to resell Asoka paint. It is because there are many factors beside mentioned in this research that might influence the decision to resell. Therefore, the next researchers are expected to be able to identify more factors that not mention in this study which might influence the decision to resell.

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The Effect of Liquidity, Solvency, and Business Risk on Dividend Policy in Primary Consumer Goods Sector Companies on the Indonesia Stock Exchange

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Abstract: Payment of dividends is a crucial policy since it can affect the financial condition, the growth, and the value of a firm so it needs to be done carefully. This study aims to determine the effect of liquidity, solvency, and business risk on dividend policy. This study uses seventeen samples of Primary Consumer Goods Sector companies from 2016 to 2020. The research model uses ordinary least squares (OLS) regression. The results of the study indicate that business risk has a positive effect on dividend policy, while liquidity and solvency have no effect.

Keywords: dividend policy, liquidity, solvency, and business risk.

Introduction

One of the policies that must be taken by management is to decide whether the net income earned in one period will be distributed in the form of dividends or not. A dividend policy is necessary because it ensures the availability of funding as well as growth and valuation of the company. Dividend distribution can be done by considering financial and non-financial factors, such as company liquidity, debt to equity ratio, and business risk.

Liquidity is an indicator of the company's ability to convert certain current assets into cash (Munawir, 2014). High liquidity can describe the company's good performance because with a good level of liquidity, the company will find it easier to meet dividend payment obligations (Agus, 2013: 56). The solvency ratio or leverage assesses the company's ability to pay off all of its short-term and long-term obligations with guaranteed assets owned by the company until it closes or is liquidated (Kasmir, 2016: 153). An increase in debt will reduce the company's ability to pay dividends because the company is faced with a high financial burden.

A risk is a form of uncertainty about future events (Fahmi, 2015: 21). High business risk causes the company's profit to decrease by causing a decrease in company's performance. Companies that are faced with high business risk will tend to strengthen their capital structure by reducing the dividends paid. This study aims to determine the effect of liquidity, solvency, and business risk on dividend policy. This sector is selected because it is one of the company sectors with an average level of dividend distribution that continues to increase from year to year.

Literature Review

Agency Theory

According to Jensen and Meckling (1976: 307), agency theory is a contract between the manager (agent) and the owner (principal). In order for this contractual relationship to run smoothly, the owner will delegate decision-making authority to the manager. An agency relationship is a contract in which one or more people (employer or principal) employ another person (agent) to perform a number of services delegating authority to make decisions to the agent (Jensen and Meckling, 1976: 310).

Agency theory explains the relationship between two parties, namely the principal and the agent. The principal is defined as the party who gives the mandate to another party, called the agent, to act on behalf of the agent. According to Jensen and Meckling (1976: 310), there are two kinds of agency relationships, namely between managers and shareholders and between managers and lenders (bondholders). Furthermore, Jansen and Meckling (1976) state that an agency relationship is a contract between the manager (agent) and the investor (principal).

In carrying out managerial duties, management has personal goals that may conflict with the principal's goal of maximizing shareholder wealth. This difference can lead to agency conflict and the emergence of agency costs. It is necessary to monitor improvements and costs arising from non-conformities creating problems (agency costs).

Differences in interests between shareholders (principals) and managers (agents) can be controlled in several ways such as using dividends, lower debt, shorter-term debt maturities, and postulated leasing to optimize financial decisions in reducing the associated costs with underinvestment problems and or asset replacement.

Signaling Theory

Asymmetric information causes informed parties to always provide signals in order to increase decision-making power (Spence, 1973). Information is an important element for the uninformed public. This issue is fundamental in developing countries such as Indonesia, which are faced with the problem of asymmetric information (Satrio, 2022a).

According to Brigham (2014: 98), signaling theory explains the importance of management providing information to investors so that shareholders can get an overview of the company's opportunities in increasing company value in the future. This action needs to be taken by the company to give a signal to shareholders or investors regarding the company's management in seeing the company's prospects in the future so as to distinguish good quality companies from poor quality companies.

Published company reports can be used as a guide for shareholders and consideration in investing (Mayangsari, 2018: 479). Company management can provide company reports for internal and external interests. Investor interest can be maintained by providing information about the company to shareholders.

Bird in Hand Theory

Investors prefer cash dividends rather than being promised a return on investment in the future because receiving cash dividends is a form of certainty that reduces risk. Investors expect high dividend payments from company profits according to the investor's goal, namely investing their shares to get dividends. Investors do not want to invest in companies if dividends are received in the long term (Gordon, 1959: 99). Dividend distribution is a sign for investors, where a very large dividend increase indicates that management is optimistic about the company's future (Lintner,

1962: 243). This will cause an increase in stock prices or in other words, the number of dividends can affect the company's stock price which will have an impact on the value of the company.

Kristian and Viriany (2021: 10) state that one bird in the hand is more valuable than a thousand birds in the air. Investors prefer payment or return in the form of dividends to capital gains. Investors are more likely to choose dividends over capital gains because dividends are considered to have a smaller risk and the rate of return has more certainty than capital gains. Dividends are considered more certain because dividends can be regulated or controlled by management, but management cannot control or regulate stock prices because stock prices are formed from supply and demand. A large dividend will attract the attention of investors to invest in the company.

The Effect of Liquidity on Dividend Policy

Dividend policy concerns the issue of using the profits earned by the company and becoming the rights of shareholders, namely the distribution of profits in the number of dividends paid as dividends or to be retained in the form of retained earnings to finance investments in the future (Sparta, 2021: 50). When the company decides to distribute cash dividends, two things must be considered, namely maximizing shareholder value and the cash flow generated by the company.

It is important to pay dividends because this policy is one of the information for investors that contains data related to the prospects that investors or potential investors will get. A dividend is a distribution of assets which is usually in the form of cash deducted after net income before being included in retained earnings or in the form of shares, assets, and others (Jati, 2014: 859).

A dividend policy is a decision taken by the company to determine how much part of the net income is obtained to be distributed as dividends or as retained earnings. A dividend policy is a policy to determine some parts of net income to be distributed as dividends to shareholders and how much of that net profit will be reinvested as retained earnings by the company to be reinvested (Harmono, 2016: 72).

Liquidity is used to measure the company's ability to meet short-term financial obligations. According to Harmono (2016: 53), liquidity describes the company's ability to pay off a number of short-term debt, generally less than one year. The liquidity concept reflects management performance measures in terms of the extent to which management is able to manage working capital funded from current debt and the company's cash balance.

A good company has a sufficient level of liquidity to run the company. Companies that do not have sufficient funds to cover maturing debts can disrupt good relations with creditors. This means that in the end, the company will get a crisis of trust from various parties who have been helping the smooth operation of the company.

Through the liquidity ratio, company owners can assess management's ability to manage entrusted funds, including funds used to pay short-term obligations. Investors really need a liquidity ratio, especially in terms of cash dividend distribution, while creditors need it for guidelines for returning the principal loan with interest. Creditors and suppliers will usually hand over loans/debts to companies that have a high level of liquidity.

High liquidity can describe the company's good performance because with a good level of liquidity the company will find it easier to meet dividend payment obligations (Agus, 2013: 56). This is because the distribution of cash dividends is paid in cash, so the company must have available funds for dividend payments. Therefore, the company's liquidity position also affects the dividends that will be distributed to investors at the due date. The company will always provide good news such as dividend distribution to investors to give a positive signal to investors and other potential

investors (signalling theory). Therefore, companies that have the ability to pay dividends (liquidity) will tend to carry out this policy. The higher the liquidity, the higher the dividends that will be distributed. This is supported by Roshidayah et al., (2021: 145) and Prameisty et al., (2021: 32). Based on this description, the following hypothesis can be formulated:

H₁: Liquidity has a positive effect on dividend policy

The Influence of Solvency on Dividend Policy

Solvency shows the company's ability to guarantee overall payments. According to Kasmir (2016: 156), the solvency ratio is used to measure the extent to which company assets are financed with debt. This refers to how much debt the company bears compared to its assets. In a broad sense, it is said that the solvency ratio is used to measure the company's ability to pay all its obligations, in the long term if the company is liquidated.

The company is said to be in ideal conditions if it can meet its short-term (liquid) obligations and can also fulfill its long-term (solvable) obligations. Solvency analysis has a purpose to find out whether the company's assets are able to support the company's activities.

The solvency ratio compares the company's overall debt burden to its assets or equity. This ratio describes the number of company assets owned by shareholders compared to assets owned by creditors. If more company's assets are owned by the holder, then the company is less leveraged. If the creditor or lender (usually a bank) has dominant assets, then the company has a high level of leverage. Solvency ratios make it easier for management and investors to understand the level of risk of the company's capital structure through notes to financial statements.

The use of debt will result in a financial burden that must be borne by the company as well as benefits. The argument is based on the empirical evidence of Satrio (2022b), which shows that leverage has a positive role on firm value and profitability but can be inversely related to firm efficiency. Taking this into account, the company needs to determine the right dividend policy.

Bondholders-shareholders conflicts occur because of differences in dividend payments. Shareholders demand that the company distributes high dividends as a result of their investment. On the other hand, bondholders demand the company not to pay excessive dividends so that there is sufficient collateral/assets for debt repayment. High dividend payments cause bondholders to lose their unpaid debt repayment guarantees, thereby increasing the potential for bondholders-shareholders conflict. To make debt contracts effective, bondholders require companies that are dealing with bondholders-shareholder conflicts. This means that the higher the level of leverage of a company, the lower the dividends are given, as supported by Prameisty et al. (2021: 23) and Syahputra & Ijma (2020: 12). Based on this description, the following hypothesis can be formulated:

H₂: Solvency has a positive effect on dividend policy

Effect of Business Risk on Dividend Policy

One possibility that a company will go bankrupt due to its inability to fulfill its obligations is because of the magnitude of business risk. According to Brigham (2014: 129), business risk is the only important determinant of capital structure and it represents the amount of risk in the company's operations even if it does not use debt financing. Business risk can increase when a company uses high debt to meet its funding needs. The risk arises along with the emergence of a cost burden on loans made by the company. The greater the burden of costs that must be borne, the risk faced by the company is also greater.

Companies with high business risk should use smaller debt than companies with low business risk, because the higher the business risk, the use of large debt will make it difficult for companies to

repay their debts. Business risk varies between companies, regardless of their line of business, and is not affected by capital structure decisions. The higher the company's business risk, the more careful the company is in building its capital structure. Therefore, companies that have high risk tend to pay smaller dividends so that later they do not cut dividends if their profits fall.

Business risk arises when a company is unable to cover its operational costs and is affected by fluctuating sales and costs (Laura et al., 2018: 1689). High business risk can allow the company's inability to finance its company's operations which results in decreased profits. High business risk makes the company try to strengthen its capital structure so that the company's profits are retained, but the impact on dividend payments to shareholders decreases. Companies with high business risks will generally pay lower dividends because they anticipate dividend cuts in the future. This action is taken by the company because it anticipates a reduction in dividends in the future because a decrease in dividend payments can be considered bad by investors. The company will set a low dividend to avoid dividend fluctuations. Therefore, the obligation to pay dividends in high portions will be avoided by the company. This is supported by Ulfah & Iskandar (2017: 214) and Roshidayah et al., (2021: 150). Based on this description, the following hypothesis can be formulated:

H₃: Business risk has a positive effect on dividend policy

Methods

This research was tested using the OLS regression model. The data was collected data with a documentary study and the type of data used is secondary data. The sample is seventeen companies in the Primary Consumer Goods Sector on the IDX.

Dividend policy is measured by the dividend payout ratio, based on the comparison of dividend per share with earnings per share (Halim and Hanafi, 2009: 86). The independent variable liquidity is measured by the current ratio which is tested with a comparison between current assets and current liabilities (Hantono, 2018). Solvency is measured by debt to equity ratio tested by comparison between total debt and total equity (Kasmir, 2014). The business risk is tested by comparing the standard deviation of earnings before interest and tax with total assets (Laura et al., 2018).

Findings

Descriptive statistics

The following are the results of a descriptive statistical analysis of seventeen Primary Consumer Sector Companies on the IDX for five consecutive years:

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CR	85	0.0896	12.9010	2.493634	2.2547349
DER	85	0.1709	4.2858	1.154873	0.9818729
BR	85	0.0027	0.2641	0.049705	0.0547950
DPR	85	0.0207	2.5161	0.442198	0.3553987
Valid N (listwise)	85				

Output Source SPSS 26, 2022

Table 1 presents descriptive statistical information used in this study. The results of the analysis show that there are companies in the Primary Consumer Goods Sector on the Indonesia Stock Exchange during the 2016 to 2020 period which shows that there are illiquid companies because they have the lowest current ratio value of 0.0896. The high value of the debt to equity ratio of

4.2858 is categorized as a high-risk company, while the minimum business risk value of 0.0027 indicates that the company's management can manage assets efficiently.

Classic Assumption Test

The classical assumption tests in this study are normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The results of this study prove that the residual values are normally distributed, and there is no multicollinearity, heteroscedasticity, and autocorrelation.

Multiple Linear Regression Analysis

The following are the results of multiple linear regression tests of seventeen Primary Consumer Sector Companies on the IDX, as seen in Table 2:

Table 2. Multiple Linear Regression Results

	Konstanta	CR (X₁)	DER(X₂)	BR(X₃)
B	0.347	0.029	-0.081	1.081
T	2.868	0.556	-1.022	4.043*
F			6.044*	
R			0.430	
R²			0.154	

* Level significance 0.01

Source: Output Data from SPSS 26, 2022

Based on Table 2, a multiple linear regression equation will be formed as follows:

$$Y = 0.347 + 0.029 X_1 - 0.081X_2 + 1.081X_3$$

It can be seen that the correlation coefficient (R) is 0.430 and is positive which indicates a unidirectional relationship between variables. In addition, the value of the coefficient of determination (R Square) is 0.154. This means that the percentage of the influence of the variable liquidity (current ratio), solvency (debt to equity ratio), and business risk on dividend policy (dividend payout ratio) is 15.4 percent. In the results above, it can be seen that the F value is 6.044. These results indicate that the regression model built in this study deserves to be analyzed.

Hypothesis testing

Based on Table 2, the value of the current ratio variable (X₁) has the t value of 0.556, which means that this variable has no effect on the dividend payout ratio variable. The results of this study are not in line with Roshidayah et al., (2021: 145) and Prameisty et al., (2021: 32). This shows that high liquidity by the company does not always guarantee cash dividend payments, but is allocated for asset purchases or expansion. In addition, high current debt will result in the company's operational activities being widely used to pay debts to third parties. As a result, it reduces the company's ability to obtain optimal net income which has an impact on dividend payments. Liquidity is indeed one of the factors that influence dividend policy, but it does not mean that smooth debt payments can decide that the company will pay dividends.

The debt to equity ratio variable (X₂) has a t value of -0.081, meaning that this variable does not affect the dividend payout ratio variable. The results of this study are not in accordance with (Bawamenewi & Afriyeni, 2019) and (Wijayanto & Putri, 2018). The proportion of the use of debt does not affect dividend policy because the higher the company's debt level, the lower the amount of dividend payment can be. The greater the proportion of debt, the company has a burden to pay off the principal and interest so that the profits distributed to shareholders will be smaller.

However, high level of debt is also the reason why companies need to increase dividend payments because there are conflicts between managers and investors who have different goals. The use of debt can provide high-profit prospects which support the distribution of dividends is needed.

Business Risk (X_3) has a t value of 4.043, meaning that the business risk variable has an effect on the dividend payout ratio variable. The results of this study are in line with Ulfah & Iskandar (2017: 214) and Roshidayah et al., (2021: 150). A high-risk business will generally pay a lower dividend. This action is taken by the company because it anticipates a reduction in dividends in the future because a decrease in dividend payments can be considered bad by investors. The company will set a low dividend to avoid dividend fluctuations. Therefore, the obligation to pay dividends in high portions will be avoided by the company.

Conclusion

Based on the results above, the limitations of this study are the indicators for measuring the current ratio proxy liquidity variable which are only based on current assets, and the indicators for measuring the debt to equity ratio proxy for solvency are only based on total equity. Thus, future researchers with the same research object and year of research should be able to analyze the cash factor on the liquidity indicators and total assets on the solvency of the company.

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The Effect of Liquidity, Solvency, and Assets Turnover towards the Company's Financial Performance of Pharmaceutical Subsector on Indonesia Stock Exchange

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Abstract: Financial performance management is crucial in order to see how far the company has progressed in a certain period. This study aims to determine the effect of liquidity, solvency, and assets turnover on the financial performance of Pharmaceutical Subsector Companies on the Indonesia Stock Exchange. The sample was determined by the criteria of initial public offering so that there were nine companies sampled in this study. The testing used the ordinary least square. The result of this study shows that there is a strong relationship between variables. Liquidity does not have any effect on financial performance. There is a negative influence of solvency on the financial performance. Lastly, assets turnover has a positive effect.

Keywords: liquidity, solvency, assets turnover, financial performance

Introduction

An analysis on financial performance indicators is crucial in order to know the financial condition of the company. This indicator reflects how profitable the company's assets are in generating income (Hanafi, 2013). Financial performance is a very important thing for investors before they invest.

The management can guarantee a good financial performance through its liquidity management (Jumingan, 2006), the proportion of funding, and the company's management efficiency (Aisyah et al, 2013). A company faced with liquidity problems will find it difficult to fulfill its short-term obligations to creditors. This condition can adversely affect the company's ability to meet working capital needs, which can basically lead to a low financial performance of the company.

The proportion of the company's funding is visible on the indicator of the solvency ratio. This ratio is used to see how many the company's assets are funded by debt or how large the proportion of the company's debt is (Kasmir, 2014). If a large-debt company is feared that it will not be able to cover its debts with its own assets, it can affect the company's financial performance.

The company's efficiency can be measured by activity ratio indicator. It shows the company's ability in utilizing its entire assets efficiently for making profit (Kasmir, 2014). The company's low level of efficiency shows that the company's assets are slow to rotate. If it happens continuously, it will cause a decline in the company's financial performance.

The study aims to analyze the effect of liquidity, solvency, and assets turnover on the financial performance. The object of the Pharmaceutical Subsector Company is a commercial business focusing on the research, development, and drug distribution. The company is likely to thrive and

can survive in times of health crisis. Therefore, the author is interested in researching this subsector.

Literature Review

Agency Theory

The Agency Theory explains that a company is a nexus of contract between the owner of the economic resources, namely shareholder (principal) and manager (agent) who take care of the use and the control of resources (Jensen & Meckling, 1976: 4). Both shareholder and manager have interests. A shareholder hopes that there will be a growth in prosperity through professionals (agents) who understand the company better. However, an agent may prioritize personal interests that cause agency conflicts (Widyasari, 2015). According to Putra (2012), agency conflicts arise between some parties who have different interests and goals, which can hinder financial performance. Establishing appropriate and fair incentives for manager and watching the incurred costs to limit the manager's deviant activities can be done to reduce these risks.

The existence of conflicts leads to the emergence of agency costs. According to Jensen and Meckling (1976: 4), there are three agency costs, namely supervision costs, alliance costs, and residual loss. The supervision cost arises as a result of manager's behavior supervision. Alliance cost occurs to guarantee that the manager will comply with shareholder's interest. Shareholder's prosperity as a result of differences in decisions between shareholder and manager incentivizes managers to make any choices that will maximize shareholder's prosperity.

Signaling Theory

Signaling theory (Spence, 1973) shows the importance of a sender (the information owner) in giving a signal to the uninformed party. From a financial point of view, the company's internal parties will generally know more information about the company than any external parties. In other words, the company has an advantage of mastering the information (information asymmetry). In the conditions of information inequality, it is very difficult for the public to be able to judge a qualified company from a low one.

The existence of inequality information will generate an assumption that all companies in general are unqualified. It is called pooling equilibrium. In this case, a well-qualified company will also be placed on the same assessment as an unqualified one. For this reason, the provision of information by the company is crucial. According to Gumanti (2009), signaling by the company is intended to imply something in the hope that the external parties will make changes in the company assessment. The information that has been submitted by the company will be analyzed by the public as a positive signal (good news) or vice versa (Jogiyanto, 2010).

Modigliani Miller Theory

The modern capital structures theory was first mentioned by Modigliani and Merton Miller (MM) (1958). It states that the value of a company is not affected by its capital structure. In this approach, the value of an indebted company equals to the company that does not use any debt. MM put forward several assumptions to build their theory, as in Brigham and Houston (2001), namely no agency costs, no taxes, no bankruptcy costs, investors' borrowing at the same rate as the company, investors' being price-takers, all investors having the same information as management about the

company's future prospects, and earnings before interest and taxes (EBIT) having no effect by debt.

The approach of Modigliani and Miller (1963) then maintains the capital structure model by using taxes (Hanafi, 2013: 42). The indebted company will have a higher company value compared to ones without any debt because the creditor's paid interest can reduce the taxes. According to Brigham and Houston (2001), MM also provides some clues regarding the things to make the capital structure relevant and affect the value of the company.

Trade Off Theory

This theory explains how much the company owes and how much equity the company has, so that there is a balance between the incurred costs and profits (Modigliani & Miller, 1963). It assumes that a company's capital structure is the result of a trade-off between debt funding profit with higher interest rates and bankruptcy costs. If the benefits are greater, the additional debt is still allowed and vice versa. According to Sansoethan and Suryono (2016), a company whose capital structure is without using any debt or using total debt is in a bad state.

The company that does not use any debt in their capital will pay large taxes compared to the one that uses debt. However, the company that uses the total debt capital is also bad because their profits are used to pay interest. It is not good for the company, so an optimal capital structure is needed. This theory states that the level of profitability implies greater debt because it is less risky for creditors (Mutamimah, 2003).

The Effect of Current Ratio on Financial Performance

A financial performance is an analysis carried out to see the extent to which the company has used the rules of financial implementation properly and correctly (Fahmi, 2012). A good company's financial performance can be interpreted as a good development potential for the company that can be measured by a liquidity ratio. According to Horne and Wachowicz (2012), the liquidity ratio is used to measure a company's ability to meet its short-term obligations. It compares the company's short-term liability with the short-term resource. The purpose of the analysis on the liquidity ratio is to measure the company's ability to pay obligations that will be expired. If the company can fulfill these obligations, it is considered to be liquid and vice versa.

Current ratio is a measure of company's liquidity that can be used to measure a company's ability to meet debt needs when it is in due date. It can be calculated by comparing current assets and current debt. The high current ratio increases the company's ability to meet its short-term obligations. However, the excessive current ratio is also not good because it can be an indication of a large number of unemployed funds, which in turn can affect the financial performance of the company which has lost the opportunity to obtain additional profits.

The higher the liquidity, the lower the company's ability to generate profits is (Wachowicz and Horne, 2012). It is in accordance with Indriyani et al (2017: 17) and Anggraeni (2019) who state that a current ratio has a negative influence on the financial performance. Based on the descriptions above, a hypothesis can be formulated as follows:

H1: Current ratio negatively affects the financial performance.

The Effect of Debt-to-Assets Ratio on Financial Performance

A solvency ratio is used to measure the extent to which a company's assets are financed with debt. It means how much debt the company bears compared to its assets. The purpose of the analysis on this ratio is to assess the company's ability to pay off its obligations.

Debt-to-asset is a solvency ratio that can show the percentage of a company's assets provided by creditors (Brigham & Houston, 2001). The total debt includes all current liabilities and long-term debt. A low debt-to-assets ratio indicates the greater creditor's guarantee when liquidation occurs and less risk is faced by the company. The higher this ratio, the higher the financial risk is faced by the company. If the debt burden is getting bigger, it has a potential to affect the company's financial performance because the company has to pay every interest on its debt (Trade Off Theory).

A company that shows a high debt-to-assets ratio reflects the increased risk of the company's inability to pay all of its obligations. This is in accordance with Supardi et al (2016: 26) and Darmawan & Nurochman (2016) who state that the debt-to-assets ratio has a negative influence on a financial performance. Based on the description above, a hypothesis can be formulated as follows:

H2: Debt-to-assets negatively affects the financial performance.

The Effect of Assets Turnover on the Financial Performance

Activity Ratio measures how effective a company is at utilizing all its assets and involves a comparison between sales levels and different types of assets. Total asset turnover is an activity ratio used to measure the turnover of company's entire assets and the number of sales obtained from each amount of money of the assets (Cashmere, 2016: 185). It shows that the higher the assets turnover, the more efficiently the company uses its assets to generate sales, and vice versa (Satrio, 2022b).

The higher the turnover of assets indicates the more efficient the use of company's entire assets. In other words, the same amount of assets can result in higher sales volume. If this ratio increases, the financial performance will follow.

When analyzing the ratio of TATO for several periods shows a trend of rising, it gives an idea that the use of assets is more efficient (Sawir, 2001). It is in accordance with Prakoso and Chabachib (2016: 11) and Indriyani et al (2017: 17) who state that assets turnover has a positive influence on the financial performance. Based on the description above, a hypothesis can be formulated as follows:

H3: The total assets turnover has a positive effect on the financial performance.

Methods

This study aims to examine the effect of liquidity, solvency, and assets turnover on the financial performance. The population in this study is the entire Pharmaceutical Subsector Companies on the Indonesia Stock Exchange, which until 2020 amounted to twelve companies. Nine of them already had 2016-2020 IPO (Initial Public Offering) criteria and did not suspend during the research period. The dependent variable in this study is the financial performance which is proxied by Return on Assets (ROA) by comparing net profit and total assets. Independent variables include liquidity ratio measured by current ratio that compares current assets with current debt, while solvency in this study is measured by debt-to-assets ratio which compares total debt and total

assets (Satrio, 2022a). Assets turnover can be measured by the comparison of net sales and total assets (Cashmere, 2016).

Findings

Descriptive Statistical Analysis

Descriptive statistic is used to give an idea of the variables of the study. Table 1 shows the results of it as follows:

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio	45	0.8978	8.3182	3.016080	1.6506774
Debt-to-assets Ratio	45	0.0769	0.8318	0.388412	0.2023444
Total Assets Turnover	45	0.4845	1.8103	1.095600	0.2944149
Financial Performance	45	-0.0303	0.2426	0.086205	0.0649894
Valid N (listwise)	45				

Source: Processed Data, 2022

The research shows that there is a phenomenon in PT Indofarma, Tbk. From 2016 to 2019, it produced a consecutive ROA as follows: -0.0125; -0,0302; -0,0226; and 0.0057. It shows that the company experienced a decline in 2017 and an increase in 2018 and 2019. Based on the TATO ratio, in 2019 the company experienced a decline of 0.1223 from the previous year which was not in line with the ROA in that year, where it experienced an increase of 0.0283 from the previous year.

Classical Assumption Test

The classical assumption test aims to determine the accuracy of the regression model in this study. The linear regression model can be well-considered if it meets the conditions in the classical assumption test, such as residual normal distribution, non-multicollinearity, heteroscedasticity, and autocorrelation. The study shows that the data have been distributed normally and there are not any problems of multicollinearity, heteroscedasticity, and autocorrelation.

Table 2. Recapitulation of Test Results

Constant		Current Ratio	Debt-to-Assets Ratio	Assets Turnover
0.051	B	0.007	-0.185	0.051
0.023	Std. Error	0.004	0.043	0.023
2.227	T	1.547	-4.257	2.222
F	12.690			
Correlation (R)	0.698			
Adjusted R Square	0.449			

Source: Processed Data, 2022

Based on the results, the correlation coefficient value (R) is +0.698 which proves a strong and positive relationship between variables. The independent variable explains the 44.9 percent dependent variable. The value of F_{count} at 12.690 indicates that the study is worth analyzing.

The Effect of Current Ratio on Financial Performance

The results show that the value of t_{count} is 1.547, which means that the current ratio does not affect the financial performance. Therefore, the first hypothesis (H1) in this study is rejected. This result is not in line with Indriyani et al (2017) and Anggraeni (2019). The current ratio which does not have any influence on financial performance can happen as a company with a high level of liquidity shows an adequate internal fund so that they have a greater chance of profit. However, the company may not be able to use these funds well so that the generated profits are not always optimal. According to Horne and John (2012), liquidity is inversely proportional to profitability. The higher the company's liquidity level, the lower the company's ability to generate profit is, which reflects the company's idle funds so as to minimize the profitability of an entity (Sawir, 2009).

The Effect of Debt-to-Assets Ratio (DAR) on Financial Performance

Based on the results above, the value of t_{count} is -4.257 with the negative regression coefficient value at 0.185, which means that DAR has a negative effect on financial performance. It is in accordance with H2 and in line with Supardi et al (2016) and Darmawan & Nurochman (2016). The higher the debt composition compared to the company's equity indicates a high financial risk of the company because it has to pay every interest on its debt (Trade Off Theory). This condition will have an impact on the net profit in the company and also reduce the company's financial performance.

The Effect of Assets Turnover on Financial Performance

The results also reveal that the value of t_{count} is 2.222 with the positive regression coefficient value at 0.051, which means that assets turnover has a positive effect on financial performance. The result of this study is in line with Prakoso and Chabachib (2016) and Indriyani et al (2017), and thus, the H3 is accepted. Having a positive influence proves that the more efficient the company is from utilizing the number of company assets, the higher sales volume becomes and the better the financial performance will be. The low assets turnover total can affect the company's financial performance because the low net sales can indicate that the company does not make any maximum use of the company's assets.

Conclusion

Based on the research that has been carried out, it can be concluded that liquidity does not affect the financial performance, solvency has a negative effect, and assets turnover has a positive effect. Based on the results of the research above, the author found a unique result as a company with a high level of liquidity should be able to encourage a high level of financial performance as well. However, this study shows that the company with a high level of liquidity does not have any effect on the financial performance. Other researchers can do another test with different samples and indicators.

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The Influence of Capital Adequacy, Liquidity, and Operational Efficiency on Profitability in Banking Subsector Companies on Indonesia Stock Exchange

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Abstract: Bank profitability reflects the company's performance in making a profit over a certain period. This study aims to determine the influence of capital adequacy, liquidity, and operational efficiency on profitability in 41 Banking Subsector Companies on the Indonesia Stock Exchange. This form of research is a causal associative method that tests three hypotheses. The test results show that capital adequacy and operational efficiency negatively affect profitability, while liquidity has a positive effect.

Keywords: capital adequacy, liquidity, operational efficiency, profitability.

Introduction

Bank profitability is one of the important indicators for measuring bank performance because it reflects the bank's ability to make a profit during a certain period (Almunawwaroh & Marlina, 2018: 2). Banks need to guarantee high profitability in order for their performance to be good in assessment. The higher the bank profitability is, the greater the level of profit it achieves and its position in terms of asset use is good as well (Dendawijaya, 2009: 118). To achieve a high level of profitability, it is necessary to carry out various efforts and strategies to support the bank's good level of performance from various aspects, including capital (Masdupi & Defri, 2012; Astohar, 2016), liquidity (Prasetyo & Darmayanti, 2015; Prasanjaya & Ramantha, 2013), and operational efficiency (Prasetyo & Darmayanti, 2015; Buchory, 2015).

Bank capital shows the management's ability to supervise and control the occurred risks that can have an impact on the size of the bank's capital. Banking companies need to guarantee adequate capital to deal with possible bad things that might happen in the future. If the bank has an adequate capital, it can support its operational activities so that it will open up greater opportunities in increasing its profitability (Prasetyo & Darmayanti, 2015: 2603).

Liquidity management is important in bank operations because the funds managed are obtained from public which are short-term and withdrawable at any time. In carrying out their activities, banks need to maintain a level of liquidity in order to obtain high profitability by distributing credit to public (Kusmana & Sumilir, 2019: 35).

The efficiency of the bank's operations is an important factor in order to achieve good financial performance. Operational efficiency is a bank's ability to manage operational costs efficiently while maximizing service to customers in order to generate optimal operating income. Banks that are efficient in reducing operational costs can reduce losses experienced in managing their business so that profits will also increase (Soares & Yunanto, 2018: 43).

Banking Subsector Companies need to ensure good financial performance to maintain public trust. The purpose of this study is to determine the influence of capital adequacy, liquidity, and operational efficiency on profitability in companies in the subsector.

Literature Review

Agency Theory

Agency theory explains the existence of a contractual relationship between two parties. One is called the principal, who assigns duties to the agent to carry out duties on behalf of the principal and delegate authority to the agent (Jensen & Meckling, 1976). The agent is responsible for managing the company's finances to achieve the goals of the owner (principal) and making the best decision for the principal. He will be compensated based on the contract in return.

Agency relationships cause conflicts due to interest differences between an agent and a principal, or so-called agency problems. One of the causes is asymmetric information which is an imbalance of information distribution between the principal and the agent. It occurs when a manager as a company controller is more aware of internal information and future prospects compared to shareholder. It emerges the agency costs to monitor the manager's performance to accommodate the wishes of shareholder, including auditing costs and internal control, intensive provision or compensation, and contracts with the third parties to anticipate manager's possible dishonesty.

Signalling Theory

In Signaling Theory (Signaling Theory (Spence, 1973)), a signal provision from a sending party (the owner of the information) who seeks to provide relevant information can be utilized by the receiving party. This theory explains how a company should give signals to the users of its financial statements about what it has carried out to realize the wishes of its owners and other information that proves that the company is better than others.

Signal theory arose as a result of the presence of asymmetric information problems. This problem can be mitigated by giving more information signals to others (Morris, 1987: 48). The management seeks to provide information in term of reducing unequal information between the company and external parties. The information provided by the management as a form of signaling to the public can be written in annual financial statements. The one contained in the report is useful for external parties to assess the company's performance and its future prospects.

Profitability

Profitability reflects a company's ability to make a profit over a certain period. The profitability ratio can be used to assess it to make a profit (Kasmir, 2016: 196). Analysis related to profitability is important in order to acknowledge whether the profit targeted by the company in a certain period has been achieved (Prasanjaya & Ramantha, 2013: 233).

Profitability can be measured by using the return on asset (ROA) ratio. This ratio is used to measure the level of bank management's ability to generate overall profit (Dendawijaya, 2009: 118). Furthermore, according to Purwoko & Sudiyatno (2013: 27), ROA is used to measure the bank management's ability in managing its controlling assets for generating various income or profits. The greater the result of this calculation, the better the bank's performance will be showed because assets can generate returns. On the contrary, a negative ROA value reflects a profitability loss (Prasetyo & Darmayanti, 2015: 2599).

Capital Adequacy

Bank capital reflects management's ability to monitor and control risks. Banks need to guarantee an adequate capital to deal with possible bad things in the future. A capital reflects a bank's ability to maintain capital adequacy and management's ability to identify, measure, and control, the risks that can affect the amount of bank capital (Kusmayadi, 2018: 787).

Bank capitalization can be measured by using capital adequacy ratio (CAR). This ratio reflects how far the bank's assets that contain risk are financed from its own capital funds in addition to obtaining funds from outside sources (Dendawijaya, 2009: 121). Furthermore, according to Raharjo and Elida (2015: 71), it can be used to describe the bank's ability to develop a business and bear the risk of business loss. It serves to accommodate the risk of loss that a bank is likely to face. Bank Indonesia sets this ratio at a minimum of 8 percent. The higher the CAR, the stronger the bank is to bear the risks of each credit and cover the decline in risky productive assets (Masdupi & Defri, 2012: 4).

Banks with increasingly guaranteed capital adequacy ratio (CAR) prove that the company in this case is able to support the achievement of profitability that has been targeted by the company. The high level of this indicator means that the capital owned by large banks can be used to expand lending activities so as to open up opportunities to generate interest income affecting an increasing ROA. It is proven by the researches of Masdupi & Defri (2012) and Astohar (2016) which state that CAR has a positive effect on ROA. Based on the description above, a hypothesis can be formulated as follows:

H₁: Capital adequacy positively affects profitability.

Liquidity

Liquidity indicates the company's ability to meet financial obligations that must be completed immediately at the time of being billed. Liquidity is a financial performance ratio that describes a company's ability to meet expired short-term obligations (Kasmir, 2016: 110). Banking companies that are able to guarantee their liquidity will have ability to fulfill their financial obligations that will be expired.

Bank liquidity is measured by using a loan to deposit ratio (LDR). This ratio is used to measure bank's ability to repay withdrawals made by depositors, by relying on a credit provided as a source of liquidity (Dendawijaya, 2009: 116). Moreover, according to Purwoko and Sudiyatno (2013: 29), it is used to assess a liquidity of a bank by dividing the amount of the credit given to the third-party funds. Bank of Indonesia sets the LDR at least 78 percent and 92 percent at maximum. A high LDR level indicates that the bank is in an illiquid condition or the company is unable to fulfill its obligations, and vice versa (Prasetyo & Darmayanti, 2015: 2594). If LDR level is at the safe limit of 78-92 percent, it indicates that the bank is liquid or considered as capable and effective in managing the funds that have been entrusted by customers.

The higher the LDR, the greater the amount of funds distributed to customers in the form of credit is. The high level of this indicator will increase revenue which in turn has an impact on increasing ROA. It is proven by some researches of Prasetyo & Darmayanti (2015) and Prasanjaya & Ramantha (2013) which state that LDR has a positive effect on ROA. Based on the description above, a hypotheses can be formulated as follows:

H₂: Liquidity has a positive effect on profitability.

Operational Efficiency

Efficiency has an important role in the company because it is one of the indicators of financial performance (Satrio, 2022). Operational efficiency means that the costs incurred to make a profit are lesser than the profit obtained from the use of the company's assets. Banks that are efficient in reducing their operational costs can reduce losses due to its inaccuracy in managing its business, so profits will also increase (Soares & Yunanto, 2018: 43).

Operational efficiency is measured by using the operational efficiency ratio (OER). This ratio is usually used to measure the level of efficiency and ability of banks to carry out their operational

activities (Dendawijaya, 2009: 120). Operating expenses are calculated based on the sum of total interest expenses and total of other operating expenses. Meanwhile, operating income is a sum of total interest income and other total operating income (Purwoko & Sudiyatno, 2013: 30). Bank Indonesia sets an ideal OER value at a maximum of 90 percent. The lower OER level generated by the bank's management performance, the better it becomes. It indicates that the bank is more efficient in using existing resources for its operational activities (Prasetyo & Darmayanti, 2015: 2595).

Operational efficiency (OER) in banking has an important role because it aims to support profitability increase. The smaller the EOR ratio, the more efficient the operating costs incurred by the bank in carrying out its operations are and the greater operating income received by the bank is. It increases the company's profit which in turn has an impact on increasing ROA. It is verified by the researches of Prasetyo & Darmayanti (2015) and Buchory (2015) which state that OER has a negative effect on ROA.

Based on the description above, a hypotheses can be formulated as follows:

H₃: Operational efficiency negatively affects profitability.

Methods

The method used in this study is a causal associative method. The data is quantitative data, in which the secondary data is obtained from annual financial statements. The population in this study is all Banking Subsector Companies on the Indonesia Stock Exchange during the observation period from 2016 to 2020. The sampling used is purposive sampling with the criteria of companies that have an IPO no later than 2016. The population in the study is 47 companies with a sample of 41 companies.

The dependent variable used in this study is profitability (ROA). Meanwhile, the independent variables include capital adequacy (CAR), liquidity (LDR), and operational efficiency (OER). The data of this study were analyzed using SPSS version 22 and multiple linear regression analysis was used as the analysis method.

Findings

The outputs of the descriptive statistical analysis used in this study can be seen as follows:

Table 1. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	205	0.0901	1.4828	0.235920	0.1291968
LDR	205	0.3933	1.6306	0.877547	0.1945577
OER	205	0.5611	2.6123	0.955841	0.2972037
ROA	205	-0.1335	0.0397	0.005057	0.0255099
Valid N (listwise)	205				

Source: Output from SPSS 22, 2022

Table 1 presents the descriptive statistical information used in this study. The results of the analysis show that the Banking Subsector Companies on the Indonesia Stock Exchange during 2016 to 2020 have the lowest capital adequacy value of 0.0901 and the highest of 1.4828. The CAR value meets Bank Indonesia's minimum requirement of eight percent so that banking companies are regulated to have relatively adequate capital. The lowest liquidity of 0.3933 reflects that the bank is relatively liquid because it has distributable funds for customers. The low OER value of 0.5611 indicates that banks have optimal performance in managing their operational costs quite efficiently. The lowest profitability is -0.1335 and the highest value is 0.0397. The condition and financial performance of the companies sampled in this study have not been completely good. It is indicated by the existence of companies that have suffered losses.

Classical assumptions tests include the tests of normality, multicollinearity, heteroskedasticity, and autocorrelation. The results show that the residual distribution is normal, there are no symptoms of multicollinearity and heteroskedasticity, and there are no autocorrelation issues. The result of classical assumptions test in this study is approved.

Table 2 shows the results of multiple linear regression analysis, correlation analysis, determination coefficient, F test, and t test:

Table 2. Regression Result Recapitulation

Model	<i>Unstandardized</i> B	T
(Constant)	0.488	30.895***
CAR	-0.030	-2.129**
LDR	0.035	3.176***
OER	-0.787	-36.053***
R	0.949	
<i>Adjusted R Square</i>	0.889	
F	476.537***	

Note: ** $p < 0.05$; *** $p < 0.01$

Based on Table 2, there is an unidirectional and strong relationship among the variables of capital adequacy (CAR), liquidity (LDR), and operational efficiency (OER) with profitability (ROA), which is indicated by the value of the correlation coefficient (R) of 0.949. In addition, the adjusted value of R square is 0.899 which indicates that the research model can provide an explanation for the change in profitability by 89.90 percent. The value of F_{count} at 476.537 indicates that the regression model in this study is worth analyzing. The regression equation used is as follows:

$$Y = 0.488 - 0.030 X_1 + 0.035 X_2 - 0.787 X_3 + e$$

The Influence of Capital Adequacy on Profitability

Based on Table 2, the result shows that the value of t is -2.129 . It indicates that the capital adequacy (CAR) negatively affects profitability (ROA). It might be caused by the weight of risks derived from bank assets, namely lending. An increase in lending will provide a potential increase in credit risk, so that it will encourage an increase in total risk-weighted assets (RWA) derived from credit. The higher the RWA owned by a bank, the less the CAR is. It shows that the decrease in CAR can be caused by an increase in lending, which can lead to more bank interest income. Thus, it increases profit before tax which in turn will have an impact on the increase of profitability (ROA).

Bank Indonesia regulation related to the value of CAR that must be met by banks is with a minimum requirement of eight percent. It requires banks to prepare capital reserves in order to meet the minimum conditions set while sustaining the productive risky assets. The too high CAR value indicates that the bank has a large capital ability to carry out the company's operational activities. However, the amount of bank's capital does not mean that it can make good use of its capital sources in making a profit. Banks that have large capital yet not balanced in investment and lending will be a burden for the company. A large CAR value indicates idle funds and proves that the company is inefficient in fund distribution to other parties. Thus, it will lead to a further decrease in the profit generated by the company which can affect to the decline of profitability.

The Influence of Liquidity on Profitability

The result reveals that the value of t is 3.176 . It shows that liquidity (LDR) has a positive effect on profitability (ROA). The higher LDR value, the greater the amount of third-party funds distributed by banks to customers in the form of credit is. The amount of credit distribution will determine the bank's profit. It is due to the high indicator that can increase bank interest income, namely in the form of profit from lending. As the consequence, it will have an impact on increasing profitability (ROA). Thus, the amount of third-party funds and credit distributed by the bank will determine the obtained profit.

The Influence of Operational Efficiency on Profitability

Based on the test results, the value of t is -36.053 . It indicates that operational efficiency (OER) negatively influences profitability (ROA). The OER ratio shows the efficiency of the bank in carrying out its operational activities. The smaller the OER is, the more efficient the bank carries out its operational activities. It is shown by the more efficient the bank's operational expenses is, so that the bank's operating income will be greater. In the end, it will have an impact on increasing profitability (ROA). On the other hand, if the value of OER increases, the ROA will decrease because the bank will be more inefficient in carrying out its operational activities. It is indicated by the operating expenses that are greater than operating income.

Large operating expenses can be triggered because banks form some impairment loss reserve expenses to deal with the risk of productive assets loss. An increase in operating costs without an increase in operating income will result in a reduction in profit, thereby reducing profitability (ROA).

Conclusion

The purpose of this study is to determine the relationship between capital adequacy, liquidity, and operational efficiency to profitability in Banking Subsector Companies on the Indonesia Stock Exchange during the 2016-2020. The results show that capital adequacy and operational efficiency negatively influence profitability, while liquidity has a positive effect on profitability.

This research has limitations related to sampling research from banking sector companies with only five years period, which is from 2016 to 2020. The author suggests the next researchers to analyze non-performing loans, which is a ratio that measures the potential of credit quality to determine its role in the company's profitability.

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INNOVATION, PROMOTIONAL, AND COMPETITIVE ADVANTAGE ON THE PURCHASE DECISIONS IN PT TRI MANDIRI SEJATI PONTIANAK

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Abstract: The purpose of this study is to analyze the influence of product innovation, promotional appeal, and competitive advantage on the purchase decisions of the Honda Vario automatic motorcycle at PT Tri Mandiri Sejati Pontianak. The population in this study are consumers who have purchased Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak with a total sample of 115 respondents with a sampling technique based on the purposive sampling method. The data analysis uses causality method with multiple linear regression model and the processing uses SPSS software version 23. Based on the results of the study, it is known that product innovation does not have a positive effect on purchasing decisions while the promotional attractiveness and competitive advantage have positive effects on purchasing decisions.

Keywords: product innovation, promotional appeal, competitive advantage, purchasing decisions

Research Background

The automotive industry has been experiencing a decline in sales lately. Based on the data from the Indonesian Motorcycle Industry Association (IMIA), the development of motorcycle production in Indonesia is greatly affected by the pandemic shown by the phenomenon that occurred in 2020. The data shows that the realization of motorcycle sales in Indonesia during the months of January to October 2021 fluctuated. Although there was an increase in March (38.02 percent), June (68.25 percent), and August (24.80 percent), there was a decline again in September (1.16 percent). In order to increase the economic growth as the effects of the pandemic, the Indonesian government issued various policies, especially for automotive industry, such as providing trade tax subsidies, lowering interest rates, providing incentives through zero percent down payment arrangements, and reducing the RWA credit (Risk Weighted Assets) which turned out to be able to increase motorcycle sales growth in 2021.

Consumer decision-making can be seen through the indicators that support it. Product innovation is one of the factors that support consumers in making purchasing decisions. The efforts made by the company in improving, fixing, and developing products do not only attract consumers to buy products/services, but they can also eliminate the feeling of boredom of the goods offered. The companies that innovate well will have an impact on the consumer decision-making process. Promotion is an important factor in improving purchasing decisions because through advertising a company directs persuasive communication to buyers and public through mass media, such as newspapers, magazines, tabloids, television, direct email, and others. Promotions carried out by the automotive industry are usually in exhibitions or any interesting events. They mean to improve consumers' purchasing decisions. A competitive advantage must be possessed by companies to outperform competitors in offering greater value to consumers. In an effort to retain consumers, companies are required to be able to foster buying interest and finally make purchase decisions, where the company must be able to identify consumer behavior in making purchasing decisions.

Based on data from PT Tri Mandiri Sejati Pontianak, the development of Honda Vario automatic motorcycle sales can be seen in Table 1 as follows:

Table 1. Vario Sales Development

Year	Unit Type	Number of Sales (Unit)	Total Sales (Unit)	Growth in Sales Amount (%)
2018	Vario 125	921	1,494	-
	Vario 150	573		
2019	Vario 125	887	1,277	(14.52)
	Vario 150	390		
2020	Vario 125	494	719	(43.70)
	Vario 150	225		

Based on the description and data on the production, sales, and sales development of Vario, the author would like to further examine whether aspects of product innovation, promotional appeal, and competitive advantage can increase the purchase of Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak.

Based on the data on the development of Vario sales at PT Tri Mandiri Sejati in Pontianak, the number of sales of Vario units in 2020 decreased by 43.70 percent, compared to 2019 which only decreased by 14.52 percent. This was triggered by the peak of the pandemic that occurred in 2020, where the government issued policies to prevent the spread of COVID-19 such as a ban on travel, the implementation of CARE (Community Activities Restrictions Enforcement), and work from home (WFH). In addition to these phenomena, the author also wants to examine whether product innovation, promotional appeal, and competitive advantage can improve consumers' purchasing decisions. This linkage is supported by researchers (Rasyid & Indah, 2018; Syaleh, 2017; Laura & Ringo, 2017) which state that the variables of product innovation, promotional appeal, and competitive advantage have a significant effect on purchasing decisions. However, those were conducted before the pandemic that affected globally, especially in the automotive industry. Therefore, the author is interested in researching the influence of product innovation, promotional attractiveness, and competitive advantage on purchasing decisions further at PT Tri Mandiri Sejati in Pontianak. The purpose of this research is to empirically prove how product innovation, promotional appeal, and competitive advantage can improve the purchase decision of Honda Vario automatic motorcycle at PT Tri Mandiri Sejati Pontianak.

Literature Review and Hypothesis Development

Product Innovation

An innovation is an ability carried out by a company to produce new ideas, products or thoughts. It is done in order to meet market demand, increase the growth of the industry, and heighten product differentiation. Products are goods offered to the market to be purchased, used, or consumed and can satisfy the needs and desires of consumers. If reviewed in more detail, the determinants of consumer satisfaction of the product include not only physical attributes but also non-physical ones, such as price and seller's name. Therefore, product innovation can be used as a means for companies to compete. (Sudaryono, 2016: 207; Suendro, 2010; Mulyani & Mudiantono, 2015. Porter & Maulana, 2006: 157; Princess, 2017: 19). Product innovation is an introduction of a completely new product or service that is significantly improved in terms of product characteristics and purpose of use. Product innovation does not only create new products produced by the company, but can also be understood as improving the quality of products that

have been introduced to the market before (Ratnawati, Amanda & Pradana, 2019: 22; Dhewanto *et al.*, 2014). Product innovation can be measured through indicators of improving product quality, developing new products, and utilizing technology (Sok, O'Cass & Sok, 2013).

H₁: Product innovation has a positive and significant effect on purchasing costs.

Promotional Appeal

A promotion is closely related to the activities carried out by the company in building attractive communication with consumers by showing the quality of the products being marketed. However, producers and consumers have different perspectives regarding promotional appeal. Manufacturers consider promotion as an activity to inform about products and services, and remind consumers not to forget about the product. As for consumers, promotion is a communication between producers and consumers. The main objectives of promotion are informing, influencing, and persuading, as well as reminding target consumers (Kurnia, Djumali & Istiqomah, 2016; Susilo, Ariyanti & Sumrahadi, 2017; Wawo, Lapijan & Kawet, 2016; Syaleh, 2017; Tjiptono, 2008: 221-222). Promotional appeal can be measured through indicators of the uniqueness of the concept of promotional activities, attractive promotional attributes, and provocative promotion (Meliani & Ferdinand, 2015).

H₂: Promotional appeal has a positive and significant effect on purchases.

Competitive Advantage

A competitive advantage is a process of company formation that distinguishes one company from another by providing value advantages to customers. In creating a competitive advantage, the company is expected to increase the ability to maintain its entered market share. The goal of competitive advantage is to determine a profitable and sustainable position (profitable and sustainable) towards competitiveness through the ability to develop a set of core competencies that allows the company to serve customers better than its competitors (Aryana, Wardana, & Yasa, 2017; Dewi & Ekawati, 2017; Herawati, Hamdani & Sulilawati, 2021; Hery, 2017: 39). Competitive advantage can be measured through product uniqueness, high resale prices, and service quality indicators (Laura & Ringo, 2017).

H₃: Competitive advantage has a positive and significant effect on purchasing orders.

Purchase Decisions

A decision making can be interpreted as a process of evaluating and choosing various alternatives according to certain interests that are considered to be benefit the most by setting a choice. In making decisions, consumers usually make considerations before making a purchase. Such considerations may be faced by consumers, ranging from an economic perspective, relationships with others as a result of social relationships, the results of rational cognitive analysis, or even emotional uncertainty. Each purchase decision has a structure that includes several components, such as decisions regarding the type of the product, product form, brand, sales, number of products, time of purchase, and payment methods (Sudaryono, 2016: 119-120; Priyanto *et al.*, 2014; Amrullah & Siburian, 2016; Oscar & Keni, 2019). Purchase decisions can be measured through indicators of the steadiness of a product, habits in choosing products, recommendation to others, and repurchases (Rumengan, Alum & Wenas, 2015).

Research Methods

Sampling and Data Collection

Data is collected from consumers who meet the criteria to represent the existing population. A total of 115 representative samples voluntarily participated in the study. The sampling method uses the Purposive Sampling method which is a sampling method with certain criteria. The criteria for respondents taken as a sample were those who purchased Honda Vario automatic motorcycles at PT Tri Mandiri Sehati Pontianak in 2020 who were willing to fill out a questionnaire. The author held meetings with consumers, conducted structured interviews assisted by a set of questionnaires, asked questions, and filled out questionnaire items related to the research model. In total, the author had 115 respondents with complete data to conduct this study.

Measurement

The variable measurements used in this study are adapted from previous relevant studies. The author adapted the study of Sok, O'Cass, & Sok (2013) which used indicators to improve product quality, to develop new products, and to use technological benefits to measure the product innovation; the study of Meliani & Ferdinand (2015) which used indicators to improve the concept of promotional activities, attribute of attractive promotions, and provoactive promotion to measure the promotion attractiveness; the study of Laura & Ringo (2017) which used indicators of product quality, sales with higher price, and the quality of service to measure competitive advantage; and the study of Rumenga, Alum & Wenas (2015) which used indicators of stability product, habit in buying products, recommendation to others, and doing repurchases.

Findings

Measurement of Validity and Reliability

The author used multiple linear regression models and the data was processed using SPSS software version 23. The data from 115 respondents were analyzed to observe validity and reliability as presented in Table 2 and followed by a testing of the proposed hypothesis, as presented in Table 3.

Table 2. Measurement of Validity and Reliability

Variables and Indicators	Validity	Reliabilities	Cronbach's Alpha	Conclusion
Product Innovation			0.751	Reliable
• Improving Product Quality	0.816	0.639		Valid & Reliable
• Developing New Products	0.815	0.664		Valid & Reliable
• Technology Utilization	0.829	0.708		Valid & Reliable
Promotional Appeal			0.728	Reliable
• Uniqueness of the Concept of Promotional Activities	0.805	0.617		Valid & Reliable
• Attractive Promotional Attributes	0.825	0.601		Valid & Reliable
• Provocative Promotion	0.786	0.701		Valid & Reliable
Competitive Advantage			0.739	Reliable
• Product Uniqueness	0.781	0.686		Valid & Reliable
• High Resale Price	0.812	0.636		Valid & Reliable
• Quality of Service	0.839	0.633		Valid & Reliable
Purchasing Decision			0.888	Reliable
• Stability of a Product	0.863	0.858		Valid & Reliable

• Habits in Buying Products	0.875	0.847		Valid & Reliable
• Recommendation to Others	0.909	0.827		Valid & Reliable
• Repurchasing	0.809	0.884		Valid & Reliable

As presented in Tabel 2, the validity test results of the overall question variables of product innovation, promotional appeal, competitive advantage, and purchase decisions show that R_{count} is greater than R_{table} $df = (N-2)$ ($115-2= 113$) with the value of R_{table} 0.1832. Thus, it can be said that the variable data of product innovation, promotional appeal, competitive advantage, and purchase decisions are valid so that further testing can be carried out. The four variables have good reliability as measured by the value of *Cronbach's Alpha* which is more than 0.60. They are 0.751 for product innovation, 0.728 for promotional appeal, 0.739 for competitive advantage, and 0.888 for purchase decisions. The validity and reliability of the research have met the required limit values, so it can proceed to the hypothesis testing process.

Hypothesis Testing

Based on the results of testing the SPSS hypothesis version 23 that has been carried out, the following results are obtained:

Table 3. Hypothesis Testing

Hypothesis	T test	Sig	Cut Off	Conclusion
H1: Good product innovation does not have a positive and insignificant influence on the Purchase Decisions of the Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak.	1.270	0.207	>0.05	H1 is rejected, which means the presence or absence of product innovation is not a determinant of the purchase decision.
H2: Good Promotional Attractiveness has a positive and significant influence on the Purchase Decisions of Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak.	2.395	0.018	<0.05	H2 is accepted, which means by providing promotional appeal frequently can improve purchasing decisions.
H3: A good Competitive Advantage has a positive and significant influence on the Purchase Decisions of the Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak.	4.825	0.000	<0.05	H3 is accepted, which means the more effort to achieve a competitive advantage, the greater it will affect the purchasing decisions.

As seen in Table 3, the result of the study contained in the product innovation variable shows that the value of t_{count} is 1.270 and the value of t_{table} is 1.9816 ($df= N - \text{number of free variables} - 1$). It means that the value of t_{count} is smaller than the value of t_{table} ($1.270 < 1.9816$), with the significance level of t_{count} by 0.207 is greater than 0.05 ($0.207 > 0.05$). It can be said that good product innovation does not have a positive and significant influence on purchase decisions. Thus, H_1 is rejected. It is irrelevant to the research conducted by Rasyid & Indah (2018) on the Influence of Product Innovation and Price on Purchase Decisions. The result of Rasyid & Indah's research shows that product innovation has a significant effect on purchase decisions. The reason is because some new products will succeed in a short time, while others will fight for a longer time to be accepted by consumers. It all depends on the characteristics of the innovation of the product and how the product is received by the consumers. How quickly an innovation spreads on the market depends on how far communication from marketing to consumers spreads.

The promotional appeal variable shows that the value of t_{count} is 2.395 and the value of t_{table} is 1.9816. It means that the value of t_{count} is greater than the value of t_{table} ($2.395 > 1.9816$), with the significance level of t_{count} by 0.018 which is smaller than 0.05 ($0.018 < 0.05$). Therefore, it can be said that good promotional appeal has a positive and significant influence on purchase decisions. Thus, H_2 is accepted. The results of this study are in line with the research conducted by Syaleh (2017) on the Effect of Product Quality, Price, Promotion, and Distribution Place on Yamaha Motorcycle Purchase Decisions on CV Tjahaja Baru Bukittinggi. The results of Syaleh's research show that promotion has a significant effect on purchase decisions. It means that PT Tri Mandiri Sejati Pontianak has succeeded in attracting promotions well so that the products offered by the company have their own uniqueness. When a company manages to attract promotions to potential consumers well, it will bring an anticipated profit.

The variable of competitive advantage shows that the value of t_{count} is 4.825 and the value of t_{table} is 1.9816. It means that the value of t_{count} is greater than the value of t_{table} ($4.825 > 1.9816$), with the significance level of t_{count} by 0.000 which is smaller than 0.05 ($0.000 < 0.05$). It can be said that a good competitive advantage has a positive and significant influence on purchasing decisions. Therefore, H_3 is accepted. The results of this study are in line with the research conducted by Laura & Ringo (2017) who conducted research on the Influence of Product Quality and Competitive Advantage on Purchase Decisions with Brand Image as an Intervening Variable. The results of Laura & Ringo's research show that competitive advantage has a significant effect on purchase decisions. It means that PT Tri Mandiri Sejati Pontianak has won a competitive advantage so that company products such as Honda Vario have more value and benefits than its competitors. When a company has succeeded in creating a competitive advantage well, it will bring profit to the company.

Research Conclusions

This study aims to build a conceptual model of how product innovation, promotional appeal, and competitive advantage influence in improving purchase decisions. Acceptance of the hypothesis that the author proposed provides several conclusions. There are two accepted hypotheses, namely the variables of promotional appeal and competitive advantage which state that they have positive effects on purchase decisions. Besides, there is one hypothesis that is rejected, namely product innovation. Acceptance and rejection of the hypotheses reveal several managerial implications, especially for PT Tri Mandiri Sejati Pontianak, such as there are several causes for the failure of an innovation or new product. One of them is that the new product is not the same as the previous one. However, it does not mean that the company does not conduct any innovation. Yet, most consumers have a conformity with the previous products so they are less interested in new ones. Thus, the company needs to innovate products that can be directly accepted by the public so that they can attract consumers. Consumers will also be more interested in buying if the promotions carried out by the company are very unique and easy to understand. They also want to buy a product which is different from their competitors or has special characteristics that bring many advantages for them and attract their interest to buy some. The company is expected to pay more attention to various aspects that can encourage the level of consumer decisions to buy, such as offering appropriate discounts, serving excellent service, and providing availability of Honda Vario automatic motorcycles at PT Tri Mandiri Sejati Pontianak.

This study has several limitations. Firstly, the low value of *R Square* of 29.70% means that there are many other factors that influence purchase decisions. Secondly, the limitations of research using questionnaires are that sometimes the answers given by respondents do not indicate the real situation. Thirdly, there is a rejection on the researcher's hypothesis about the influence of product innovation on purchase decisions.

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The Influence of Product Quality and Service Quality on the Decision of Selling Donald Jelly Products at PD Bintang Jaya Nusantara

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Abstract: This study aims to build a conceptual model to analyze the relationship between product quality and service quality variables in improving the selling decision of the customers of PD Bintang Jaya Nusantara in Pontianak. The form of research is causality research. The technique of data collection is by distributing questionnaires and the technique for sampling is purposive sampling. The number of samples is one hundred and ten (110) respondents. The analytical method used in this study is multiple linear analysis that is processed by a computer using the SPSS program version 24. Data testing includes validity test, reliability test, classical assumption test, correlation test, coefficient of determination test, multiple linear regression test, F test and t test. From the results of the analysis and discussion, it is concluded that product quality and service quality significantly influence the decision to sell Donald's jelly products at PD Bintang Jaya Nusantara.

Key words: Product Quality, Service Quality, Selling Decisions

Introduction

The current trend of modern society is usually filled with various activities ranging from recreation, sports, relaxing, or enjoying culinary to looking for snacks. Snacks are small portions of food consumed in spare time or during recreation. They are not the main menu, but to delay temporary hunger and are usually consumed to help increase energy or to enjoy the taste.

Based on data quoted from CCN Indonesia, a survey titled The State of Snacking 2020 conducted by Mondelez International about the increasing trend of Indonesian snacks during the 2020 pandemic, almost 60 percent of respondents admitted to consuming more snacks than before. This number is 14 percent more than the global average, which is 46 percent. In fact, 64 percent said that eating snacks was considered a very important activity. Indonesian people themselves have an average of 3.15 for snacks consumption a day. This frequency is more than the global average with only 2.30 times a day. The survey results prove that the level of demand for snack products in Indonesia is quite promising.

Various types of snacks sold in the market cause people to have many choices to buy snacks. People can buy snacks from street vendors to supermarkets. In determining the snacks to be consumed, people are faced with various considerations such as taste, aroma, price, to the quality of the snack itself. The high interest of the Indonesian people towards snacks, especially the residents of Pontianak, provides an opportunity for shops to sell snacks. Shops that sell snacks usually buy it from snack distributors in Pontianak. In selling snacks to the society, these shops are faced with various considerations to determine which snacks to sell. One of the factors that influences the decision to sell for shops is the quality of the product. Product quality is related to value and customer satisfaction, namely shops that will buy products and sell them. Product quality greatly affects the success or failure of a sales process.

Another influencing factor is service quality. Service quality is a measure of how well the services provided by distributors meet customer needs. Service quality is an important thing that must be maintained by the company so that customers are satisfied with the services provided and are expected to be loyal in order to give a positive effect on selling decisions. The decision to sell is the transfer of ownership rights to goods or services from one party to another accompanied by receipt of compensation from the party receiving the goods and services. The selling decision is certainly expected to increase sales volume. Certainly, shops that are going to sell the product will search for information about the product, including the product quality or service quality from distributors and requests from customers.

A previous study conducted by Amilia and Asmara (2017) stated that product quality had a significant effect on purchasing decisions. However, it was contradictory to the research conducted by Amelisa, Yonaldi and Mayasari (2016). It was stated that product quality had no significant effect on purchasing decisions. Based on the background of the study, the author of this research sees that there is a gap in the results of the research from the two journals on the product quality variable towards purchasing decisions that are still unclear. It can be said that the quality of the product does not affect the decision to sell. Therefore, the author is interested to do further research on the role of product quality on selling decisions.

Literature Review

Product Quality

A product is anything offered to the market for attention, purchase, use, or consumption to satisfy a desire or need. Products can be physical goods, services, experiences, events, people, places, properties, organizations, information, and ideas. Products are seen as important by consumers and serve as the basis for making selling decisions. Products that have the ability to satisfy needs and wants will be seen as having good quality. It will convince the shop to not hesitate to sell these products. (Alma, 2016:139; Kotler & Keller, 2016:389)

Successful distributors certainly provide good quality products, because providing quality products will encourage consumers to buy them. Product quality refers to anything that the company offers as one of the main tools of marketers in the form of products or services that have good characteristics, functions and performance so that the product or service can satisfy the wants and needs in accordance with what is needed by customers. Product quality can be a determining factor for customers' satisfaction after making a purchase and use of a product. Customers will feel satisfied if the results of the evaluation show that the product used have good quality. (Kotler & Armstrong, 2018:225; Kotler & Keller, 2016:156; Pride & Ferrel, 2016:365; Lupiyoadi in Harjadi, 2021:8-9)

The quality of a product in the form of goods or services is determined through its indicators, namely durability, quality of raw materials and distinctive taste. First, durability means how long the product in question lasts before it expires and must be replaced. Second, the quality of raw materials means the good or bad quality of a product based on the quality of the raw materials used. Using good quality raw materials will certainly produce good quality output. Lastly, distinctive taste means the product has a variety of unique flavors that provide the main picture of the product. Hence, it becomes a differentiator between the product and other competing products. (Putri & Ferdinand, 2016:7; Ghanimata & Kamal, 2012:4; Jienardy, 2017:705). Based on a study on product quality variables, the authors can build the first hypothesis, which is:

H₁: There is a positive and significant relationship between product quality and selling decisions.

Quality of Service

Providing good service to consumers in a business is the key to the success of a company to meet the needs and desires of consumers. Service can be interpreted as an activity offered by one party (a company) to another party (consumers) which aims to provide satisfaction to consumers to meet their needs and desires. Providing good service to consumers means consumers will feel satisfied with the services provided. (Indrasari, 2019:57; Kotler & Keller, 2016:422)

Service quality is a crucial issue for any company wherever the product is produced. With sufficient understanding of the company's service quality, it can create value for customers. Successful distributor certainly needs a good quality of service because by providing good service, customers will certainly feel satisfied and make the distributor as their first choice. So the distributor is expected that there will be an increase in sales volume. Thus, it can be interpreted that service quality is a form of conformity between how well the services provided meet consumer expectations and even exceed consumer expectations. The quality of service can be formed from the evaluation of long-term performance as a whole. Service quality can be seen from the gap between customer expectations and the customer's evaluation of the services provided. The quality of service can be perceived as good and satisfactory if the service received or felt is in accordance with consumer expectations. If the service received exceeds consumer expectations, then the service quality is perceived as ideal. Service quality can be realized through meeting customer needs and desires as well as the accuracy of delivery to keep pace with customer expectations (Pride & Ferrel, 2016:391; Schiffman & Wisenblit, 2019:102; Tjiptono & Chandra, 2016:125).

The quality of service can be measured through its indicators. There are five indicators of service quality used in this study, namely: Reliability, Responsiveness, Assurance, Empathy, and Tangibles. First, Reliability refers to the company's ability to provide accurate service since the first time without making any mistakes and deliver its services in accordance with the agreed time. The second indicator is Responsiveness which means the willingness and ability of employees to help customers and to respond to their requests as well as to inform them when services will be provided and then to provide services quickly. The next indicator is Assurance, which is related to the behavior of employees' ability to generate customer's trust in the company, and the company can create a sense of security for its customers. Then, Empathy means that the company understands the problems of its customers and acts in the interests of customers; also, it gives personal attention to customers and has comfortable operating hours. The last indicator is Tangibles, which is the physical evidence in accordance with the attractiveness of physical facilities, equipment, and materials used by the company, as well as the appearance of employees. (Tjiptono & Chandra, 2016:137). Based on a study on service quality variables, the author can build a second hypothesis, namely:

H₂: There is a positive and significant relationship between service quality and sales decisions.

Selling Decision

The decision to sell begins with the desire of a seller to see several influencing factors such as products that generate profits and products that are sought after by customers. In entering the selling decision stage, shops initially look for information about the products to be sold, market demand, and the profits to be gained from these products. In the end, the shops will take action to decide to buy products based on the choices most sought after by customers for resale. It can be interpreted that the decision to sell is an activity related to searching, buying and influencing potential buyers carried out by the seller to invite prospective buyers to buy goods and services offered by the seller. Therefore, there is a transfer of ownership rights to goods or services from one party to another accompanied by receipt of compensation from the party receiving the goods and services (Manik, 2015:45; Pradiani, 2017:50; Gusrizaldi & Komalasari, 2016:292).

The decision to sell can be measured from its indicators. The author uses three indicators of selling decisions. First, the condition and ability of the seller, which is the ability of the seller to believe in the buyer so that he can successfully achieve the expected sales goals. Second, market conditions, which is the market as a group of buyers or parties targeted in sales which can also affect sales activities. Third, capital, that is the ability of the seller to provide resources such as money or goods so that the seller can introduce the product well to potential buyers (Swastha & Irawan, 2008: 406).

Research Methods

The form of this research is causality research, which aims to determine the influence of product quality and service quality on selling decisions. Data collection techniques were carried out by collecting questionnaires. The sampling that the author used was purposive sampling and the 110 respondents were obtained by using the solvin formula. In this study, the author tabulated and analyzed the results of respondents' answers by using a measurement scale, namely the rating scale. The analysis method used in this study is multiple linear analysis with the help of the SPSS program version 24.

Discussion

This study aims to analyze the significance of product quality and service quality in influencing the decision to sell Donald's jelly products on PD Bintang Jaya Nusantara. The author used the linear regression analysis method to analyze the results of the questionnaires. Data processing was carried out by tabulating data on the results of the number of respondents, which was then grouped and managed using a rating scale. The rating scale starts from index numbers 1 to 10. The criteria used in this study are the criteria for the rating scale with a scale of 1–10 with the following explanation: a score of 1.00–40 is interpreted as a low perception; a score of 40.01–70 is interpreted as a medium perception; and a score of 70.01–100 is interpreted as a high perception. Then, the author used the SPSS program version 24 to make it easier to statistically analyze the results of respondents' answers regarding product quality, service quality, and selling decisions. The following are the results of the respondents' answers in this study, which can be seen in Table 1.

Table 1. Respondents' Answer Results

Indicators	Answer Weight	Answer Index	Average
Product Quality (X_1)			
1. Durability	808	73.45	
2. Quality of Raw Materials	803	73.00	72.97
3. Distinctive Flavors	797	72.45	
Conclusion: On average, the respondents give a high perception of product quality variables.			
Quality of Service (X_2)			
1. Reliability	810	73.64	
2. Fast Response	805	73.18	72.93
3. Guarantee of Certainty	808	73.45	
4. Personality / character	796	72.36	
5. Physical Evidence	792	72.00	
Conclusion: On average, the respondents give a high perception of the variable quality of service.			
Selling Decision (Y)			

1. Seller's Conditions and Capabilities	805	73.18	
2. Market Conditions	783	71.18	72.42
3. Capital	802	72.91	

Conclusion: On average, the respondents give a high perception of the variables of selling decisions.

Source: Process Data, 2022

Based on Table 1 above, it can be seen that respondents provide a high perception of product quality variables. This means that the quality of Donald's jelly products is good in terms of product durability so the respondents can store the product for a long time. Respondents also want products that have various flavors. Therefore, the company must add new flavor variants in order to attract the attention of consumers so that they can resell products and make a profit. Then, on the service quality variable, the findings revealed that respondents gave a high perception of service quality. This means that the quality of services provided is good. Respondents feel that the availability of products and the rare occurrence of product vacancies can be a superiority for respondents in sales activities. Respondents also want fast and responsive service and friendly service from staff. Thus, the company must always maintain and improve the skills of the staff in order to serve respondents well. Companies can also add more employees for delivery so that products ordered by respondents can be delivered quickly.

The following are the results of statistical testing of the variables of product quality, service quality, and selling decisions used in this study in Table 2:

Table 2. Statistical Test Results

Validity Test		
$X_{1,1} = 0.850$	$X_{2,1} = 0,768$	$Y_{1,1} = 0,893$
$X_{1,2} = 0.860$	$X_{2,2} = 0,821$	$Y_{1,2} = 0,881$
$X_{1,3} = 0.894$	$X_{2,3} = 0,820$	$Y_{1,3} = 0,886$
	$X_{2,4} = 0,771$	
	$X_{2,5} = 0,770$	
Reliability Test		
$X_1 = 0.836$	$X_2 = 0.849$	$Y_1 = 0.862$
$X_{1,1} = 0.814$	$X_{2,1} = 0.827$	$Y_{1,1} = 0.783$
$X_{1,2} = 0.788$	$X_{2,2} = 0.805$	$Y_{1,2} = 0.837$
$X_{1,3} = 0.713$	$X_{2,3} = 0.808$	$Y_{1,3} = 0.800$
	$X_{2,4} = 0.823$	
	$X_{2,5} = 0.827$	
Normality Test		
Kolmogorov-Smirnov Test (K-S test or KS test)		0.200
Multicollinearity Test		
Tolerance	$X_1 = 0.237$	$X_2 = 0.237$
VIF	$X_1 = 4.217$	$X_2 = 4.217$
Heteroskedasticity Test		
	$X_1 = 0.508$	$X_2 = 0.653$
Autocorrelation Test		
	$1.7262 < 1.813 < 2.2738$	$(DU < DW < 4-DU)$
Correlation Test		
	$X_1 = 0.835$	$X_2 = 0.858$
Coefficient of Determination Test (R²)		
	R Square (%) = 0.767 or 76.7%	
Multiple Linear Regression Test		
	$X_1 = 0.385$	$X_2 = 0.371$
F Test		
	F Count	176.223
	Level of significance	0.000
t Test		
	$X_1 = 3.774$	$X_2 = 5.659$
	Sig = 0.000	Sig = 0.000

Source: Processed Data, 2022

Based on Table 2, the questionnaire model is valid and reliable. For the classical assumption test with normality test, multicollinearity test, heteroskedasticity test, and autocorrelation test, problems are none. Based on the correlation test that was carried out, it shows that X_1 and X_2 have a correlation relationship to Y . The coefficient of determination shows that the value of R Square: 0.767 means that all variables have a contribution of 76.7 percent to the decision to sell, while 23.3 percent is influenced by other factors that are not explained in this study. Furthermore, from the multiple linear regression test, it can be seen that all free variables X_1 and X_2 have a positive influence on the variables of selling decisions. In Test F, a significant figure of 0.000 was obtained, which is smaller than 0.05 and F_{count} value of 176.223, which is greater than F_{table} which is 3.09. This shows that the variables of product quality and service quality influence the decision to sell Donald's jelly products at PD Bintang Jaya Nusantara.

T test is used to discover how far one independent variable affects the dependent variable. The test results on the product quality variable show that the first hypothesis, or H_1 , namely the product quality variable has a significant effect on the selling decision variable, is accepted. This means that PD Bintang Jaya Nusantara has succeeded in creating Donald's jelly products that have good product quality so that they will increase selling decisions showed by an increase in sales volume. Previous research conducted by Segati (2018) revealed the influence of product quality on sales levels. This shows the alignment of the results between the results of the previous study and the results of this study that there is an influence of product quality variables on the decision to sell Donald Jelly products at PD Bintang Jaya Nusantara.

Next on the service quality variable, the second hypothesis or H_2 , namely the service quality variable has a significant effect on the selling decision variable, is accepted. This means that PD Bintang Jaya Nusantara has succeeded in creating employees who have good and reliable service quality. This will affect customers' decisions to buy products for resale. The better the services provided by the company to consumers, the better their selling decisions will be. Previous research conducted by Esti Handayani (2019) revealed that service quality has influence on sales levels. This shows the alignment of the results between the results of the previous study and the results of this study that there is an influence of service quality variables on the decision to sell Donald Jelly products at PD Bintang Jaya Nusantara.

Conclusion

Based on the results of data analysis and hypothesis discussion, it can be concluded that the variables of product quality and service quality have a positive and significant effect on the decision to sell Donald's jelly products at PD Bintang Jaya Nusantara. This research can provide implications that suggest that companies must provide good quality products in order to attract more consumers. Also, companies need to provide good quality services, and make it a habit in business so that it will make consumer to have good perceptions, to be satisfied and to stay loyal to the producer. This study still has limitations where the value of the coefficient of determination, namely the resulting R Square value, is 0.767, or 76.7 percent. This shows that product quality and service quality in this study have the ability of 76.7 percent to determine the selling decisions, while the remaining 23.3 percent are influenced by other factors that affect selling decisions.

Some suggestions can be useful for PD Bintang Jaya Nusantara. In terms of product quality, in order to continue to provide good quality products, the company should add more variants of flavor so that consumers can meet their needs and desires to feel satisfied. As for the service quality, PD Bintang Jaya Nusantara should also continue to improve service quality by conducting training to employees and making service quality a habit in business. Therefore, it is expected that consumers will be loyal which will have an impact on increasing sales. Then, for future research, it is expected to be able to add new variables that have not been used in this study because product

quality and service quality are not able to fully examine the influence on selling decisions. Besides, it is expected to take more samples, such as retail stores domiciled in areas around Pontianak. This aims to improve the accuracy of the data in subsequent studies to see and assess any changes in respondents over time.

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The Influence of Service Quality, Store Atmosphere, and Location Attractiveness on Purchase Decisions at Dapur Kita Minimarket in Pontianak

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Abstract: The study was conducted to understand the service quality, store atmosphere, and location attractiveness of Dapur Kita Minimarket Pontianak, to discover the customer responses to the service quality, store atmosphere and location attractiveness of Dapur Kita Minimarket Pontianak, and to determine the purchase decision at the Dapur Kita Minimarket Pontianak. The statistical analysis was using SPSS statistical software version 23 with testing validity, reliability, classical assumptions, analysis correlation and determination coefficient, while coefficient of determination analysis and hypotheses discussion were using the F test and t test. The results of the validity test show that all variables are valid. Also, the results of reliability testing reveal that the instrument used by the author is reliable. The results of the correlation analysis show that each variable of service quality and store atmosphere has a significant and positive effect on the variables of purchase decision, while the location attractiveness variable is not significant for the variables of purchase decision.

Keywords: Service Quality, *Store Atmosphere*, Location Attractiveness and Purchase Decision.

Introduction

A retail company is a product marketing system in which sales transactions are directly addressed to consumers. The presence of retail makes the distribution of goods or services needed by consumers easier to reach. It can be seen from the existence of a modern retail business in Indonesia, especially in Pontianak City. This is due to changes in people's shopping patterns, which are becoming increasingly selective with the retail business that is developing at this time, forcing business owner to be more creative in attracting consumer interest. Since the number of retail businesses in Pontianak is increasing, business owner must be able to do more creative business not only by providing gifts, discounts, and low prices but also by being able to improve service quality, store atmosphere, and attractiveness of the location. There are several other retail outlets that became shopping centers in Pontianak City.

The retail business was originally managed traditionally to become more innovative, competitive, and dynamic. Due to the consumer's lifestyle, it causes the development of supermarkets. Especially at the time of the entry of Covid-19 into Indonesia, several retail companies were forced to close their supermarket outlets which was caused by the limited mobility of the community. The outlets shutdown led to the decline in the performance of the retail business sector.

Managing a modern retail company is useful in increasing competitiveness. Hence, the company must require and improve the quality of service. Service quality is the level of service related to meeting the expectations and needs of consumers. Next thing is to create a store atmosphere related to the mood of the store with the purpose to generate an interesting impression in consumer perception. A pleasant atmosphere with an adequate design, clean, fragrant, and a good display will attract consumers to make purchasing decisions on a product, and the attractiveness

of the location is the main key in a retail business because location will be an attraction for consumers. A reachable location will be the beginning of consumer perception from the outside looking at the store or restaurant when they want to decide on a purchase.

The number of retail companies in Pontianak has made companies increasingly compelled to be able to improve the quality of company services in order to maintain consumer buying interest in the products they sell. Based on the phenomenon that occurs in the world of retail business, the author discovers how to improve purchasing decisions on a product through the quality of service, store atmosphere, and location attractiveness in one of the retails, namely the Dapur Kita Minimarket in Pontianak, located on JL. Sungai Raya Dalam No.89. This minimarket has been established since 2009. The following is presented in Table 1, the sales income of Dapur Kita in Pontianak from 2016-2020 as follows:

Tabel 1. Sales Growth

Year	Total Sales	Growth	
		Rp	%
2016	9,741,112,000	-	-
2017	10,472,328,000	731,216,000	7.51
2018	10,142,224,000	(-330,104,000)	(3.15)
2019	9,622,893,000	(-519,331,000)	(5.12)
2020	8,558,000,000	(-1,064,893,000)	(11.07)

Source: Processed Data, 2020

Based on Table 1 above, it can be seen that there has been a decrease and increase in its sales income over the past five years at the Dapur Kita Minimarket in Pontianak. From 2016 to 2017, sales turnover increased by Rp 731,216,000, or 7.51 percent. Then, in 2018, sales turnover fell to Rp 330,104,000, a 3.15 percent decrease from 2017. In 2019, sales turnover fell by Rp 519.331,000, or 5.12 percent, compared to 2018. In 2020, there was a decrease of Rp 1,064,893,000, or 11.07 percent, from 2019.

The calculation result of the sales turnover started from 2016 to 2020. There are several things that can attract the attention of consumers to shop at Dapur Kita Minimarket in Pontianak, namely the quality of service, store atmosphere, and attractiveness of the location. Hence, the retailer must be able to understand the factors that influence purchasing decisions in shopping at the Dapur Kita Minimarket Pontianak. With the sales data in Table 1, it can be seen that there are decreases in sales. Therefore, the author wants to examine further the influence of service quality, store atmosphere, and location attractiveness on purchasing decisions or purchase intentions from customers of Dapur Kita Minimarket in Pontianak in order to implement the right strategy to increase sales.

Research conducted by Dewi and Wibowo (2021) states that service quality has a significant effect on purchasing decisions, but it is different from the research conducted by Ramadani (2019), which states that service quality does not have a significant effect on purchasing decisions. Based on the background of these researchers, the author saw a difference between the results of the research from the two journals on the variable quality of service to purchasing decisions that lacked clarity. Then it can be said that the quality of service does not affect the purchase decision. Therefore, the author is interested in researching further about service quality in purchasing decisions.

Literature Review

Service quality

Quality is the totality of features and characteristics of a purchased product or service that depends on its ability to satisfy consumer's need. There are three quality orientations that should be consistent with each other: consumer perceptions, products, and services.. Therefore, service quality is the appearance of the product or performance which is the main part of the company's strategy in order to achieve sustainable excellence and fulfill the needs and desires of the customers as well as the accuracy of the delivery to balance expectations. If the quality is low, it will put the company in a competitive disadvantage, potentially driving away dissatisfied customers. (Lupiyoadi & Hamdani, 2006: 175, Priansa, 2017: 51, Tjiptono & Chandra 2017: 90, Lovelock, Wirtz, & Mussry, 2011:152).

There are five main dimensions of service quality that consumers use to assess or determine service quality. Reliability is the ability to provide the promised service reliably and accurately Responsiveness is willingness to support customers and provide fast service. Assurance (guarantee) is the knowledge, competence, courtesy, and ability of the employees to generate confidence and trust. Empathy is the ease in establishing relationships, effective communication, personal attention and understanding of customer needs. Tangible/Physical Evidence is in the form of physical facilities, equipment, appearance of employees, and installed materials are physical manifestations and services received by consumers. (Tjiptono & Chandra 2017: 88).

H₁: There is a significant influence between service quality on purchase decisions.

Store atmosphere

Store atmosphere is important in the store because the physical characteristics of the store such as architecture, layout, lighting, display, colour, temperature, music, aroma as a whole will build a positive image in the minds of the consumers. Store atmosphere can be created through the following: Exterior, including the entire physical building that can be seen from the shape of the building, doors, and others. Exterior design is part of the physical facility that has a role in providing a place for visitors. Basically, the interior design must be compatible with the exterior design. This is very necessary in order to maintain the balance of the image that has been formed from outside the building. Some components that can be defined for the interior are aesthetics, space planning, and layout. Store aesthetics concerns how store facilities can create an impression that affects consumer's feelings, namely the views and feelings of consumers about the atmosphere of the store when visiting. Store layout is the physical arrangement and placement of products, equipment, and store departments. The purpose of layout is to give motion to consumers, display products or services, as well as attract and maximize sales in general (Utami, 2018: 322&356, Ma'ruf,2 006: 201, Foster, 2008: 61&62).

Atmosphere creation is also an environment design through visual communication, lighting, colour, music, and fragrances to design the emotional and perceptual responses of customers and to influence customers in buying products. (Utami, 2018: 356). Visual Communication consists of graphics, signs, and stage effects. Lighting consists of highlighting goods that creates a calm atmosphere and maintains an impression while hiding its flaws. Colour is a very powerful tool in products visualization. The use of attractive colours can enhance a retail impression and create appeal, generate attention, create excitement and stimulate someone to take action. Music is the management of a retail store by playing music with a genre that is liked by its customers, for example hip hop songs are played in a teenage fashion store or jazz music in a jewelry store. Aroma is one of the elements of the store atmosphere that is deliberately presented in the restaurant environment as one of the attractions for visitors.

H₂ : There is a significant influence between store atmosphere on purchase decisions.

Location attractiveness

Determining the right location will be a success or the main key in a retail business because the location will be an attraction for consumers to shop for their needs. Choosing the right business location will determine the success of the business in the future. For this reason, choosing a location is one of the first things to do before the company starts operating. In a goods or services company, location is a very important decision in the success of the retail business and the main key to be built by a retail company. The determination of location can affect the company's ability to serve customers. So, in order to attract customers, choosing a location is an important competitive factor, as well as the primary factor in store selection for consumers, and it also depends on the type of goods or products being traded. (Utami, 2017: 175 & 113, Ma'ruf, 2006: 115, Sopiah & Syihabudhin, 2008: 98, Suhartanto et al., 2017: 3 & 45, Tjitono, 2014: 159, Kanjaya & Susilo, 2010: 60).

In consequence, the location requires a lot of consideration when opening a retail store. The right location of an outlet will be more successful than outlets that are less strategically located. Therefore, the selection of the location requires careful consideration of the following factors. First factor is the access where the location that is passed is easy to reach by public transportation. Visibility is a location that can be seen clearly from a normal viewing distance. Traffic involves two main considerations, such as how many people passing by can provide a great opportunity for impulse buying, namely buying decisions that often occur spontaneously, without planning, and through special efforts. There is also congestion, and it can be an obstacle to spacious, comfortable, and safe parking spaces, both for cars and motorcycles. Expansion is the availability of a large space for business expansion. The environment refers to the surrounding area that supports the services provided. Competition is a competitor's location. Government regulations, for example, workshop entrepreneurs are prohibited from being too close to the surrounding residential areas (Tjitono, 2014: 159).

H₃ : There is a significant influence between the attractiveness of the location on purchasing decisions.

Purchase decisions

Decision is the process of tracing the problem starting from the background of the problem, identification of the problem until a conclusion or recommendation is formed. Consumer decision is an act of consumers to decide on a product that is considered as the needs and desires of the consumer. Every company always wants to encourage every consumer or customer to determine purchase decisions on every product offered with a variety of products offered will still encourage consumers to make choices about the products they will choose. Consumer purchasing decision is a choice of two or more with alternative choices. The consumer must have alternative choices to make a decision. On the other hand, if the consumer has no alternative to choose from and is actually forced to make certain purchases and actions, then the situation is not a decision. It is believed that there are five models in the purchasing decision-making process, which are: problem recognition stage, information search stage, alternative evaluation stage, purchase decision stage, post-purchase behavior stage. (Kotler dan Keller, 2008: 234-244, Fahmi, 2016: 56-59)

Thus, there are several indicators in deciding to buy (Rumengan, Tawas, Wenas, 2015: 12). The stability of a product when customers who shop at the Dapur Kita Minimarket feel confident in buying the products provided which are fresh and new. The habit of buying products is that the customers are accustomed to buying products that are sold at Dapur Kita Minimarket. Recommending it to other people means that the customers who usually shop at the Dapur Kita Minimarket are giving recommendation to other people and families because the products sold are relatively cheaper. Make a repeat purchase means that the customer will make a repeat purchase at the Dapur Kita Minimarket because the products provided are very complete.

Research Methods

The form of this research is using a causality research design. Causal research is structured to examine the causal relationship between variables. The data collection techniques used in this study were questionnaires and interviews. The population used in this study are consumers at the Dapur Kita Minimarket Pontianak, which exact number is unknown. The sample in this study used an accidental sampling technique. In this study, the authors used the sample of 132 respondents, with the characteristics of the respondents being domiciled in Pontianak, and the author used a rating scale. In this study, the author used 16 measurement indicators from four variables using the SPSS version 23 program.

Discussion

This study aims to analyze the influence the quality of service, store atmosphere, and location attractiveness have on purchase decisions at the Dapur Kita Pontianak Minimarket. The author conducting this study used linear regression analysis method to analyze the answers to the questionnaire that had been filled out.

The author used the assistance of the SPSS version 23 program to make it easier to analyse respondents' answers regarding variables of service quality, store atmosphere, and location attractiveness for purchasing decisions in this study. The following are the results of respondents' answers obtained by the author from the collection of questionnaires that have been filled out by respondents in this study using criteria (three-box method). The criteria used in this study are the criteria for the Rating Scale with a scale of 1–10 with the following explanation: a score of 1,00 – 40 is interpreted as a low perception; a score of 40.01 – 70 is interpreted as a medium perception; and a score of 70.01 – 100 is interpreted as a high perception (Ferdinand, 2014: 232). The following is the result of respondents' answers in this study, which can be seen in the table below, namely Table 2:

Table 2. Respondents' Answer Results

Indicators	Answer Weight	Answer Index (%)	Average
Quality of Service (X₁)			
1. Reliability	984	98.40	
2. Responsiveness	992	99.20	
3. Warranty	988	98.80	98.76
4. Empathy	983	98.30	
5. Physical Evidence	991	99.10	
Conclusion: On average, respondents give a high level of perception of service quality variables			
Store Atmosphere (X₂)			
1. Exterior	983	98.30	
2. Interior	985	98.50	98.07
3. Store Layout	974	97.40	
Conclusion: On average, respondents give a high level of perception of the store atmosphere variable			
Location Attractiveness (X₃)			
1. Access	984	98.40	
2. Visibility	994	99.40	
3. Traffic Flow	987	98.70	98.95
4. Parking Lot	993	99.30	

Indicators	Answer Weight	Answer Index (%)	Average
Conclusion: On average, respondents give a high level of perception of the location attractiveness variable			
Purchase Decision (Y)			
1. Stability in a product	972	97.20	
2. Habits in buying	980	98.00	98.08
3. Recommend to other people	982	98.20	
4. Repurchase	989	98.90	
Conclusion: On average, respondents give a high level of perception of the variables of purchasing decisions			

Source: Processed Data, 2022

Based on Table 2 above, it can be seen that this high perception means that the quality of service provided is good in carrying out fast transaction processes. Services provided to consumers if they want to find products get a good response causes the consumers to make purchase decisions. However, the company is still slow in the product claim process. Every consumer who is shopping anywhere certainly needs a quick and fast service. By serving consumers with this, consumers will feel more comfortable in finding a product that they want to buy or look for. Respondents gave a high-perception response to the store's atmosphere. High perception means the company is good at choosing bright store colors because color is a powerful tool in visualizing merchandise, but companies must conduct surveys. Still, the companies must improve the air circulation and lighting because good lighting will create interest in the store and organize goods clearly so that consumers can see the products clearly when shopping, which will affect the emotional state of buyers that causes an increase or decrease in purchases. Respondents also gave a high response regarding the attractiveness of the location, so it can be said that traffic flow is the main point that is very important in opening a business. The location chosen must be strategic, such as a location that is free from congestion, and shops must continue to provide a more adequate and safe parking area. This will make it easier and more comfortable for consumers to go shopping. If the parking space is narrow or inadequate, consumers will certainly prefer to visit other stores that have a wider parking space.

To find out how big the influence of service quality, store atmosphere, and location attractiveness have on purchase decisions at the Minimarket Dapur Kita Pontianak, the author describes the research results as presented in Table 3:

Table 3. Statistical Test Results

Validity Test			
X _{1,1} = 0.000	X _{2,1} = 0.000	X _{3,1} = 0.000	Y _{1,1} = 0.000
X _{1,2} = 0.000	X _{2,2} = 0.000	X _{3,2} = 0.000	Y _{1,2} = 0.000
X _{1,3} = 0.000	X _{2,3} = 0.000	X _{3,3} = 0.000	Y _{1,3} = 0.000
X _{1,4} = 0.000		X _{3,4} = 0.000	Y _{1,4} = 0.000
X _{1,5} = 0.000			
Reliability Test			
X _{1,1} = 0.743			
X _{1,2} = 0.722	X _{2,1} = 0.789	X _{3,1} = 0.715	Y _{1,1} = 0.794
X _{1,3} = 0.705	X _{2,2} = 0.787	X _{3,2} = 0.721	Y _{1,2} = 0.787
X _{1,4} = 0.746	X _{2,3} = 0.785	X _{3,3} = 0.721	Y _{1,3} = 0.774
X _{1,5} = 0.725		X _{3,4} = 0.788	Y _{1,4} = 0.801
Normality Test			0.200
<i>Kolmogorov-Smirnov Test (K-S test or KS test)</i>			
Multicollinearity Test			
Tolerance	X ₁ = 0.814	X ₂ = 0.862	X ₃ = 0.923
VIF	X ₁ = 1.228	X ₂ = 1.160	X ₃ = 1.084
Heteroskedasticity Test			
	X ₁ = 0.145	X ₂ = 0.414	X ₃ = 0.548

Autocorrelation Test	7624 < 1.979 < 2.2376		(DU < DW < 4-DU)
Correlation Test	X ₁ =0,000	X ₂ =0.000	X ₃ =0.005
Coefficient of Determination Test (R²)	R Square (%) = 0.303 or 30.3%		
Multiple Linear Regression Test	X ₁ = 0.205 ;	X ₂ = 0.592 ;	X ₃ = 0.172
F Test	F count = 18.552		Sig < 0,05 = 0.000
t Test	X ₁ =2.273 Sig = 0.025	X ₂ = 5.116 Sig = 0.000	X ₃ =1.750 Sig = 0.083

Source: Processed Data, 2022

Table 3 shows that the validity and reliability of test results are in accordance with the provisions. Then, the results of the classical assumption test consist of 4 tests, namely: normality test, multicollinearity test, heteroskedasticity test, and autocorrelation test, that are in accordance with the provisions. In addition, the correlation test, determination coefficient test, multiple linear regression test, F test, and t test are carried out in accordance with the provisions of each test.

The results of this study indicate that the accepted hypothesis is service quality variable. The results of this study are compatible with previous research conducted by Khasanah and Pamujo (2011) which stated that service quality had a positive and significant effect on purchasing decisions on merchandise products and store atmosphere variables. The results of this study match the previous research conducted by Ariyanto, Nuryani, and Sunarsi (2020) which stated that the Store Atmosphere had a significant effect on purchasing decisions at Alfamart BSD, South Tangerang. While the location attractiveness variable has no effect on purchasing decisions. This research is not in line with research that has been done by Polla, Mananeke, and Taroreh (2018) which stated that location has influence and significant on consumer purchasing decisions. Therefore, it can be concluded that the attractiveness of the location is not the main factor that can influence consumer purchasing decisions because consumers prioritize service quality factors and store atmosphere if a service quality and company store atmosphere are good and begin to be embedded in the minds of consumers. Consumers will be much easier and will not hesitate to make a purchase at that store because of the fast service and comfortable store atmosphere, so the results of this hypothesis are supported by previous research conducted by Hardiansyah, Nuhung, and Rasulong (2019) which stated that location had no effect on purchasing decisions.

Conclusion

Based on the results of the analysis and discussion of the influence of service quality, store atmosphere, and location attractiveness on purchasing decisions at the Dapur Kita Minimarket in Pontianak, it can be concluded that there are two accepted hypotheses. The first one is the service quality variable, store atmosphere which states a positive effect on purchasing decisions and the other one is the rejected hypothesis, namely the attractiveness of the location. The results show that the absence of company in the process of product claims that are processed slowly will cause consumers to feel uncomfortable to decide on purchase and the insufficiency in terms of air circulation and lighting in the company's room causes consumers to feel uncomfortable when shopping. Meanwhile, the location has no effect on purchasing decisions. However, it does not mean that the company does not think about the location because it does not have an effect, but the company must continue to conduct surveys so that the location owned by the company can continuously be accepted by consumers. The limitation of this research is the low value of R Square which is 30.3%, it means that there are many other factors that influence purchasing decisions.

Based on the conclusions that have been conveyed above, the suggestions that can be delivered by the author are as follows: the results of the implications show that the company should pay more attention to or retrain its employees to be more alert and fast in serving consumers or in the

process of claiming damaged products so that consumers feel comfortable in deciding to buy and the company must be better in terms of good air circulation by adding ventilation, fans and organize goods clearly so that consumers can see the products provided clearly and comfortably when shopping. Also, the company must continue to maintain the safeness of the parking lot so that it can continue to be accepted by consumers. Further researchers are advised to add other variables related to purchasing decisions so that they can provide a broader picture of what factors influence purchasing decisions.

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An Analysis on Product Innovation and Market Orientation through Superiority Competition on Marketing Performance of (MSMEs) of Food and Beverage in Pontianak

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Abstract: The study aims to determine the effect of product innovation and market orientation through superiority competition on marketing performance. The number of samples of this research study was 190 micro-small-and-medium enterprises (MSMEs) of food and beverage in Pontianak, especially coffee shop business owners or actors. The data analysis of this study was conducted using *Structural Equation Modeling (SEM)* technique with the help of *Amos 23 software program*. From the research findings, it was found that there was a direct, positive, and significant effect of product innovation and market orientation on superiority competition; superiority competition and market orientation also had direct, positive, and significant effect on marketing performance. On the other hand, product innovation had no direct effect on marketing performance. For this indirect effect, the research findings showed that superiority compete had a positive and significant effect mediating the relationship between product innovation and marketing performance with a coefficient value of 0.148, and superiority competition also had a positive and significant effect mediating the relationship between market orientation and marketing performance with a coefficient value of 0.203.

Keywords: product innovation, market orientation, superiority competition, marketing performance, micro-small-and-medium enterprises (MSMEs)

Introduction

Competition in today's business world is unavoidable. In business world competition, companies face various opportunities and threats as well, either from inside and outside the country. Therefore, every company needs to always understand what is happening in the market world, what consumers want, and various changes in the business environment in order to be able to compete with other companies. Therefore, every company needs to minimize their weaknesses and maximize their strengths. Today's rapid changes, which have been happening in terms of technological advances, customer needs, and shorter product cycles, have caused serious problems in the world of business, including for small and medium enterprises. An important key to win the business world competition lies in the company's ability to create a superiority competition.

A company can be said to have a good superiority competition if the company can do better than its competitors, for examples by being able to create new products innovatively, offer the lowest prices, provide the best quality of products, provide the best services, and have good and advance technology. With the technological advances that cannot be avoided, product(s) of a company will keep growing to a point, where all products in the market will be difficult to distinguish from one another. Therefore, to win the competition, in terms of marketing today's products, manufacturers cannot only rely on product quality as a basis, but they also need to rely on marketing strategies, commonly applied by the companies, they are: market orientation and product innovation.

Both large companies and small-and-medium-sized companies in Pontianak, West Kalimantan have been experiencing high levels of competition in terms of marketing products. The changes, which have been happening lately, in the culinary industries include an increasing competition in food and beverage industries, lack of funds, rising raw material prices, and lack of managing and marketing capabilities. Therefore, any company must work hard to maintain its survival. The progress of this medium-sized company is entirely dependent on the company's ability to create and improve its competitive power, that is being able to quickly adapt to changes that occur. In the following table, an overview of micro-small-and-medium enterprises of food and beverage in Pontianak from 2017 – 2021 is presented as follows.

Table 1. Development of Micro-Small-and-Medium Enterprises (MSMEs) of Food and Beverage in Pontianak from 2017 – 2021

NO	SUB-DISTRICT	TYPE	YEAR				
			2017	2018	2019	2020	2021
	Number of MSMEs	Unit	668	869	1.301	1.627	1.666
1	West Pontianak	Unit	201	141	307	366	372
2	South Pontianak	Unit	144	147	258	319	319
3	North Pontianak	Unit	84	87	239	257	279
4	East Pontianak	Unit	82	210	239	321	321
5	Central Pontianak	Unit	85	100	138	202	204
6	Southeast Pontianak	Unit	66	144	120	162	171

Source: Department of Cooperative, Micro Enterprises and Trade Service, Pontianak, 2021

Based on the data shown in Table 1 above, it can be seen that number micro-small-and-medium Enterprises (MSMEs) of Food and Beverage in Pontianak has been increasing during the last 5 years. In 2017, the number of MSMEs of food and beverage was 668 units, then the number increased in 2018 to 869 units. In 2019, the number of MSMEs of food and beverage increased again quite a lot to 1.301 units, then in 2020 it also increased considerably to 1.627 units, and finally in 2021, the number of MSMEs of food and beverage again experienced a modest increase to 1.666 business units.

According to the news released by *Kompasiana* (15/8/2021), the number of cafes & restaurants in Pontianak, for a period of five years (from 2017 until 2021), has been increasing drastically and the number of new cafes & restaurants keeps continuing. Generally, cafes & restaurants are often visited by young people who want to have fun and relax. With the proliferation of new cafes & restaurants, of course, it can absorb large numbers of workers and reduce the amount of unemployment.

For example, at the present time, one of the MSMEs of food and beverage, in the market-sized of cafe and restaurant businesses, has been increasing sharply, especially in Pontianak area. This can be seen from by the proliferation of cafes and restaurants that offer *ready-to-drink* coffee with high quality and affordable prices. The function of cafes and restaurants are as places to enjoy foods & beverages and places for informal relaxation as well. In the following table, a description of the number of cafe and restaurant businesses in Pontianak from 2019 – 2021 is presented as follows.

Table 2. The Development of the Number of Cafes and Restaurants in Pontianak from 2019 – 2021

NO	SUB-DISTRICT	TYPE	YEAR		
			2019	2020	2021
	Number of Cafes and Restaurants	UNIT	480	686	691
1	West Pontianak	Unit	86	112	112
2	South Pontianak	Unit	152	207	207
3	North Pontianak	Unit	63	118	120
4	East Pontianak	Unit	71	103	103
5	Central Pontianak	Unit	60	84	86

6	Southeast Pontianak	Unit	48	62	63
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Source: Department of Cooperative, Micro Enterprises and Trade Service, Pontianak, 2021

Based on Table 2 above, it can be seen that the number of coffee shops in Pontianak has been increasing each year. In 2019, the number of cafes & restaurants was 480 units, then it increased, in a fairly large of number, in 2020 to 686 units. In 2021, the number of cafes & restaurants increased again, which was not too much, to 691 units.

As stated in the background that the success key of MSMEs to win the competition in the business world relies in business performance, especially since MSMEs are currently becoming something important in supporting Indonesia's economic growth and the number of MSMEs is becoming a big potential in raising economic growth, therefore the researcher raised *micro-small-and-medium enterprises of food and beverage* in Pontianak as her research topic.

The main purpose of this research study was to analyze the effect of *Product innovation* and *Market orientation* through *Superiority competition* on *Marketing performance* of *micro-small-and-medium enterprises of food and beverage* in Pontianak.

Literature Review

Product innovation

Innovation is an idea, practice, or object that is understood as something new by each individual or other group of users. The innovation decision-making process is, principally, an activity of searching and processing information in which individuals are motivated to reduce uncertainty about the advantages and disadvantages of the innovation itself. The companies that produce products that are different from the products of other similar companies can attract consumers to buy their products. This is one of the ways that a company can do to gain a superiority competition. Continuous innovation conducted by a company becomes a basic need that will ultimately lead to a superiority competition (Sumarwan, 2010: 112).

Innovation is the practical application of an idea into a new product or process. Innovations made on products are crucially needed in maintaining consumer buying interest. Product innovation that is carried out effectively with high intensity can determine the marketing performance of a company. Higher product innovation will affect the marketing performance of a company and it will also increase a sustainable superiority competition of the company (Tjiptono, 2008: 56).

The main purpose of product innovation is not just to find new things or products, but these new things must intersect with the added value of goods or products, which means that applying new ideas to a product means adding value on the product; and if it doesn't add any value on the product, then it is not an innovation (Briones, 2014: 106). Product innovation in business world is a very important thing to be done in order that the company's product remains the choice for the potential customers. Product innovation becomes a potential thing to create people's thoughts and imaginations which ultimately attract future customers' interest.

The product innovation indicators are as follows: 1. Creativity power, that is the ability to produce new products, 2. Design change, that is the ability to develop attractive designs, 3. Quality control, that is the ability to ensure that products produced are in line with the quality standards. A product innovation does not only mean as a form of creating new products produced by a company, but it can also be interpreted as a quality improvement of the product (both in terms of raw materials and physical form or utility) that have previously been marketed (R. Heru Kristanto, 2009: 115).

Market Orientation

Market orientation is something that is important for companies, to pay attention to, in line with the increasing global competition and changes in customer needs, where companies realize that they must always understand and be close to their markets or customers. Market orientation can also be described as the most effective organizational culture in creating important behaviors for buyers or consumers to create good value and excellent business performance. Market orientation, through continuous evaluation of customer needs and wants, is a process or activity related to customer attraction and satisfaction. Market-oriented applications or practices are aiming to improve a company performance (Narver and Slater, 1990:21).

Market orientation reflects the extent to which the company can create satisfaction by meeting customer needs and wants, which is considered as an organizing principle in the company. Market orientation becomes the focus of a strategic planning of a business unit in meeting several demands covering all of the functions in the company in order to be able to absorb all important information that affects purchases. This decision-making strategy is conducted in a cross-functional way, between divisions, and in good coordination of functions to have a good commitment in carrying out marketing activities.

Market orientation consists of 3 (three) behavioural components, they are: customer orientation, competitor orientation, and inter-functional coordination. Customer orientation and competitor orientation include all of the activities involved in obtaining information about buyers and competitors in the target market and disseminating it through the business, whereas cross-functional coordination is conducted based on the customer and competitor information (Narver & Slater, 1990: 21-22). Furthermore, customer orientation is defined as having a complete understanding on the target customer's purchases, which aims at being able to continue creating excellent value for potential buyers.

Superiority Competition

Basically, every company that are competing in an industrial environment wants to outperform its competitors. Usually, companies explicitly implement this competitive strategy through the activities of the various functional departments of the company. Superiority competition is the extent to which a company can create a position that can hold the market as long as competitors exist. A company usually creates a competitive superiority through competitive power or priority which is defined as a preference or strategic aspect in which the company chooses to compete in the targeted market (Russell & Millar, 2014: 164).

Strategies must be designed to achieve sustainable superiority competition (*sustainable competitive advantages*) in order that the company can dominate the old market as well as the new market. Therefore, for a long term, the company can achieve its superiority competition in a sustainable manner through its ability to develop a set of core competencies, where the company is able to serve its customers better than its competitors. Furthermore, a core competition is meant as a unique set of capabilities developed by the company in main areas, such as product quality, customer service, innovation, flexibility, teamwork building, and other things that can outperform its competitors.

Several indicators that can be used to measure superiority competition (competitive advantages) are product uniqueness, product quality, and competitive prices. Product uniqueness is the uniqueness of the company's products that combine artistic values with customer tastes. Product quality is the design quality of the company's products. Meanwhile, competitive price is the company's ability to adjust the price of its products to the general price in the market (Irfanunnis, Hartanty, & Ratnawati (2013: 10).

Marketing Performance

In general, marketing performance is meant as a form of achievement of performance measure obtained from the overall activities conducted by a company, especially in the field of marketing

of the company or organization. In addition, marketing performance can also be considered as a ready-to-use concept used by companies to measure how successful their products have been marketed and to see how far their goals have been achieved. Marketing performance is an indicator that is often used to measure the impact of the success of the marketing strategy implemented by the company. The company's strategy can be directed to produce better marketing performance (such as the number of sales volume and sales growth rate made by the company) and good financial performance (Ferdinand, 2011: 23).

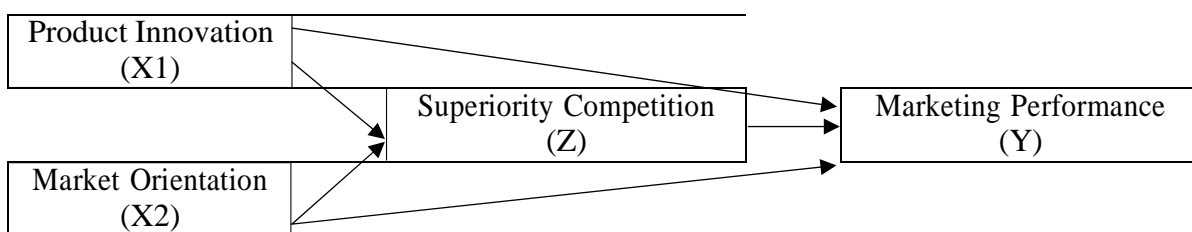
Marketing performance can be measured from data on sales level, increase of revenue or income, the number of customers, or from any other data that can describe how far the level of success of marketing products or services conducted by a company. The success of marketing performance can also be determined by what strategies the company uses to compete with its competitors. In addition, a company's marketing performance can be done in two ways, they are: internal and external ways. Especially for external way, the improvement of a company's marketing performance is usually carried out by using a market-oriented cultural approach (market orientation), that is how to understand market needs, wants, and demands. In practice, this effort becomes a necessity to carry out in optimizing business performance. Market orientation plays an important role in contributing to the improvement of a company performance.

Some of indicators that are used in assessing marketing performance are as follows: sales growth, profit growth, and the success of product marketing. Sales growth is an increase in the number of sales from year to year. Profit growth is the increase and decrease of profit per year. The success of a product marketing is that the product is well received by the market (Lila, 2013: 112-113).

Research Method

The number of populations for this research study was 207 owners of cafes and restaurants in South Pontianak District, Pontianak. The sampling technique used in this research was *purposive-sampling* technique. The calculation of sampling technique was obtained from the number of indicators, i.e., 19, which was then multiplied with 5 until 10. The data collection method used for this research study was by distributing questionnaires directly to the respondents of this research. The researcher prepared and constructed statements and questions according to the indicator of each variable. The data analysis technique used for this research study was quantitative analysis technique using a structural model with a *Structural-Equation-Modeling (SEM)* approach, with the help of *Amos version 23 program*, which consists of *validity and reliability tests, absolute fit measures, incremental fit measures, and parsimonious fit measures*. A brief theoretical framework is presented (shown) in Figure 1 below:

Figure 1. Research Model



Analysis

Validity and Reliability Test Results

Table 3. Validity and Reliability Test Results

Validity Test			
X1.1 = 0.561	X2.1 = 0.743	Z1.1 = 0.683	Y1.1 = 0.791
X1.2 = 0.682	X2.2 = 0.723	Z1.2 = 0.748	Y1.2 = 0.731
X1.3 = 0.572	X2.3 = 0.657	Z1.3 = 0.805	Y1.3 = 0.712
X1.4 = 0.617	X2.4 = 0.607	Z1.4 = 0.728	Y1.4 = 0.715
X1.5 = 0.721	X2.5 = 0.661	Z1.5 = 0.753	
VE 0.832	VE 0.833	VE 0.833	VE 0.800
Reliability Test			
CR 0.668	CR 0.698	CR 0.735	CR 0.685

Description: SLF = Standard Loading Factor ($SLF \geq 0.50$, good); Variance Extracted ($VE \geq 0.60$, good) means good validity; CR = Construct Reliability ($CR \geq 0.60$, good) means good reliability.

Goodness of Fit Indices Test Results

Table 4. Goodness of Fit Indices Test Results

Goodness of Fit Indices	Cut of value	Model Results	Explanation
Chi Square	Small or < 200	183.107	Good Fit
Probability	> 0.05	0.051	Good Fit
RMSEA	≤ 0.08	0.051	Good Fit
CMIN/DF	≤ 5.00	1.500	Good Fit
TLI	$0.90 \leq TLI < 1.00$	0.936	Good Fit
CFI	$0.90 \leq CFI < 1.00$	0.945	Good Fit
NFI	$0.90 \leq NFI < 1.00$	0.853	Marginal Fit

Hypothesis Testing Results and Discussion

Table 5. Hypothesis Testing Results

Hypothesis	Explanation	Coefficient	P-Value	Conclusion
1	Product innovation affects superiority competition	0.348	0.005	Accepted
2	Market orientation affects superiority competition	0.380	0.000	Accepted
3	Superiority competition affects marketing performance	0.504	0.000	Accepted
4	Market orientation affects marketing performance	0.429	0.000	Accepted
5	Product innovation affects marketing performance	-0.050	0.692	Rejected
Hypothesis	Explanation	Coefficient	Z-Sobel	Conclusion
6	Product innovation through superiority competition affects marketing performance	0.176	2,568	Accepted
7	Market orientation through superiority competition affects marketing performance	0.192	3,131	Accepted

Discussion

Product innovation affects superiority competition

The results of hypothesis testing on the relationship between product innovation and superiority competition variables show a coefficient value of 0.348 (positive) and a p-value of 0.005, which is

smaller than 0.05, so that it can be concluded that product innovation has a significant positive effect on superiority competition.

Market orientation affects superiority competition

The results of hypothesis testing on the relationship between market orientation and superiority competition variables show a coefficient value of 0.380 (positive) and a p-value of 0.000, which is smaller than 0.05, so it can be concluded that market orientation has a significant positive effect on the superiority competition variable.

Superiority competition affects marketing performance

The results of hypothesis testing on the relationship between superiority competition and marketing performance variables show a coefficient value of 0.504 (positive) and a p-value of 0.000, which is smaller than 0.05, so it can be concluded that superiority competition has a significant positive effect on marketing performance.

Market orientation affects marketing performance

The results of hypothesis testing on the relationship between market orientation and marketing performance variables show a coefficient value of 0.429 (positive) and a p-value of 0.000, which is smaller than 0.05, so that it can be concluded that market orientation has a significant positive effect on marketing performance.

Product innovation affects marketing performance

The results of hypothesis testing on the relationship between product innovation and marketing performance variables show a coefficient value of -0.050 (negative) and a p-value of 0.692, which is greater than 0.05, so that it can be concluded that product innovation has no significant effect on marketing performance.

Product innovation through superiority competition affects marketing performance

The results of the mediation hypothesis testing, that is the indirect effect, show that the relationship between product innovation and marketing performance through the mediation of the superiority competition variable shows a coefficient value of 0.176 (positive) and a Z-Sobel value of 2,568, which is greater than 1.96, so that it can be seen or concluded that product innovation has a significant positive effect on marketing performance through the mediation of the superiority competition variable.

Market orientation through superiority competition affects marketing performance

The relationship between product innovation and marketing performance through the mediation of the superiority competition variable shows a coefficient value of 0.192 (positive) and a Z-Sobel value of 3,131, which is greater than 1.96, so that it can be seen or concluded that market orientation has a significant and positive effect on marketing performance through the mediation of the superiority competition variable.

Conclusion and Limitations of the Research

Conclusion

Based on the data analysis, it can be seen that product innovation and market orientation variables have a direct, positive, and significant effect on superiority competition variable. The superiority competition variable has a direct, positive, and significant effect on marketing performance. The market orientation variable has a direct, positive, and significant effect on marketing performance. On the other hand, the product innovation variable does not have a direct, positive, and significant

effect on the marketing performance of micro-small-and-medium enterprises (MSMEs) of food and beverage, especially the cafe & restaurant businesses in South Pontianak District, Pontianak.

For the indirect effect, it can be seen that positive and significant results obtained from the superiority competition variable mediating the relationship between product innovation and market orientation on the marketing performance of micro-small-and-medium enterprises (MSMEs) of food and beverage, especially in the field of cafe & restaurant businesses in South Pontianak District, Pontianak.

Limitations of the Research

1. The number of samples used in this research study was limited to the context of micro-small-and-medium enterprises (MSMEs) of business owners or actors, especially in the field of cafe & restaurant businesses in South Pontianak District, Pontianak. Therefore, the research study results may not be generalizable to other dissimilar industries or businesses. Thus, any further research can develop the results of this research by taking samples outside of micro-small-and-medium enterprises (MSMEs) of coffee shop business owners or actors in South Pontianak District, Pontianak City.
2. The data collection process of this research study was carried out by distributing questionnaires to the micro-small-and-medium enterprises (MSMEs) of cafe and restaurant owners or actors in South Pontianak District, Pontianak, where as the respondents of this research study, there was a possibility that not all of them filling out the questionnaires according to the actual situation (real data). Therefore, the conclusion of this research study can only rely on the statistical results based on the nature of quantitative research method. Hence, a more in-depth interview using qualitative research method can help explain further research findings.
3. This research study only used product innovation, market orientation, and superiority competition variables to assess the marketing performance of micro-small-and-medium enterprises (MSMEs) of cafes and restaurants in South Pontianak District, Pontianak City.

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Financial Flexibility and Business Risk Effect on Capital Structure: Insight from Indonesian Energy Listed Companies

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Abstract: This study aims to examine the effect of financial flexibility, business risk, and asset structure on the capital structure of companies listed on the Indonesia Stock Exchange. A total of 33 Energy Sector Companies became the object of research from 2012 to 2020. To analyze the data, this study used a causal method with a panel regression model. Financial flexibility has a positive effect on the company's capital structure, while business risk has a negative effect. Lastly, asset structure has no effect. This study shows that companies with high financial flexibility will tend to choose debt financing. Meanwhile, high business risk will make companies more inclined to choose equity financing. This is in line with the Pecking order theory.

Keywords: Financial Flexibility, Business Risk

Introduction

Capital structure as a combination of debt and equity is an important part of management because it is related to the company's financial condition. The company's management determines its capital structure in such a way that the selection of a combination of debt and equity is in optimal proportions by considering the different costs and benefits. Wrong decisions regarding capital structure can lead to financial difficulties and ultimately bankruptcy (Alipour, Mohammadi, & Derakhshan, 2015). The company's capital structure decisions can be made by considering financial flexibility (Brounen, Jong, & Koedijk, 2006; Alipour, Mohammadi, & Derakhshan, 2015; Margaretha & Ginting, 2016; Agustawan, Efni, & Gusnardi, 2021), business risks (Friend & Lang, 1988; Eldomiaty, 2007; Abor & Biekie, 2009; Alipour, Mohammadi, & Derakhshan, 2015), and asset structure (Al-Najjar & Taylor, 2008; Viviani, 2008; Teker, Tasseven, & Tukel, 2009; Alipour, Mohammadi, & Derakhshan, 2015; Sofat & Singh, 2017).

A high level of asset structure indicates that the tangible assets of a company are large. With this large number of tangible assets, it is easier for companies to obtain external funding sources. Financial flexibility which shows the availability of adequate internal funds can also cause companies to tend not to rely on external funding so that the use of debt can be reduced. Companies with high business risk will also be inclined to avoid debt to prevent the possibility of bankruptcy. In addition, companies that have high business risks tend to have difficulty obtaining external funding.

This study aims to analyze the effect of financial flexibility, business risk, and asset structure on the capital structure of Energy Sector Companies on the Indonesia Stock Exchange. This sector is the object of research because this industry is one of the main sources of state revenue and the driving force of the national economy. In addition, this industry requires large funds so it is worth analyzing the determinants of its capital structure.

Literature Review

Modigliani-Miller (MM) Theory

The basic theory of capital structure was first established by Modigliani and Miller (1958). This theory explains that the company's capital structure is not relevant to the value of the company and does not affect the company's cost of capital. Firm value is not caused by the composition of the capital structure or a combination of debt and equity of a company but by the impact of the investment made by the company and the company's operational activities in generating profits (Modigliani & Miller, 1958). As in Sudana (2011) to support their opinion, Modigliani and Miller put forward several assumptions, namely (1) the capital market is in perfect condition, (2) the expected value of the probability distribution for all investors is the same, (3) companies can be grouped into the same classes of risk, and (4) there is no corporate income tax. Modigliani and Miller then reviewed their previous theory and incorporated tax factors into their theory as a determinant of capital structure. In this second theory, Modigliani and Miller (1963) explain that paying taxes to the government means that there is a cash outflow. The use of debt can provide tax savings to the company due to the incurrence of interest costs. Thus, it can be interpreted that the company should use debt as much as possible because the value of the company increases along with the increase in the amount of debt (Brigham & Ehrhardt, 2005). Miller (1977) extends Modigliani and Miller's model to consider the impact of personal taxes and argues that corporate taxes overestimate the benefits of using debt. Modigliani and Miller's theory is based on strong and unrealistic assumptions, so it should be noted that the implication of this theory as a general effect of debt on firm value is not a precise relationship (Brigham & Ehrhardt, 2005).

Pecking Order Theory

Pecking Order Theory was developed by Myers and Majluf (1984) who said that there was no optimal composition of capital structure. This theory explains that the company has a sequence in making funding decisions starting from funding within the company (internal) to funding outside the company (external) in determining the capital structure. According to Myers and Majluf (1984), the sequence of funding starts from funds originating from retained earnings, then comes from debt, and finally comes from the issue of new shares. This means that funding starts from sources of funds that are low-risk or the cheapest for the company.

Trade-off Theory

Trade-off Theory explains that there is an optimal composition of capital structure determined by creating a balance between tax effects, agency costs, and bankruptcy costs (Alipour, Mohammadi, & Derakhshan, 2015). According to Chiang, Cheng, and Lam (2010) companies with high levels of profit prefer having higher debt because the use of debt can provide benefits in the form of tax savings effects. After all, debt causes interest payments. Interest payments will reduce the amount of taxable income so that it can save the company in paying taxes and the value of the company is expected to increase. This indicates that the company can continue to use debt as long as it provides greater profits for the company. Companies are not advised to increase the portion of the debt if the use of debt no longer provides benefits to the company.

According to Abor and Biekie (2009) in agency theory, conflicts often occur between shareholders and debt holders and between shareholders and managers. Agency costs can arise from the issuance of debt (Jensen & Meckling, 1976). An increase in debt causes an increase in conflict between the two or in other words an increase in agency costs. The increase in agency costs is due to the potential loss that will be experienced by debt holders. Under these conditions, supervision of the company by debt holders will increase. The optimal capital structure of a firm can be determined by agency costs. To reduce the agency costs, the optimal structure of ownership and debt must be determined (Jensen & Meckling, 1976).

Capital Structure

A capital structure is a composition of debt and equity. According to Sjahrial (2008), capital structure is a balance between the use of loan capital consisting of permanent short-term debt, long-term debt and own capital consisting of preferred stock and common stock. The company requires a large amount of capital to fund activities and the company's expansion activities. Companies need to make decisions in determining where the source of funds will come from which will be used to carry out their business activities.

Fulfilling the funding needs of a company can be done in several ways. Based on the source, funding can be divided into two, namely internal funding (from within the company) and external funding (from outside the company). Funding from internal companies can be obtained from retained earnings and depreciation costs, while funding from external companies can be obtained from debt funding through loans and capital funding through the issue of new shares.

Although theoretically the optimal capital structure can be determined, in practice it is difficult to estimate the structure with certainty (Brigham & Houston, 2001). When debt is added to the capital structure it can provide benefits to the company. Companies whose sources of funds come from debt can enjoy the benefits of a tax reduction on their debt (Stretcher & Johnson, 2011). Debt will be beneficial if it is at a low level because in addition to providing tax protection due to interest costs, debt is also a cheaper source of funding compared to capital funding through the issuance of new shares.

The situation will be different when the debt portion of the company is too high. Having high debt can cause companies to experience financial difficulties (Sofat & Singh, 2017). The higher the level of debt owed by the company, the company will be more financially depressed, which can result in bankruptcy. Therefore, the decision regarding the selection of the right funding to fund the company is very crucial because it reflects the financial position of the company.

Consideration of the best and most efficient funding alternatives is absolutely done by the management. Companies need to find a composition of capital structure that does not harm various parties such as investors, creditors, and the company itself. Companies can have an optimal capital structure if the preparation of the capital structure is carried out carefully and appropriately. According to Chandra *et al.*, (2019) the most optimal capital structure is a condition where the cost of capital charged and the risks faced reach a minimum level. According to Stretcher and Johnson (2011), the optimal capital structure is a condition where the use of debt reaches the point where the value of the company is maximized (maximizing shareholder wealth).

Based on this, the capital structure is a vital issue for a company, so in making decisions it is necessary to consider many things because the good or bad capital structure will have an impact on the company's financial position. The ability of financial flexibility, the level of business risk, and the structure of assets owned are three factors that have a role in determining the composition of the capital structure of the company.

Financial Flexibility

Financial flexibility reflects the company's ability to adapt to unexpected or sudden needs and opportunities that occur in the future. According to Rapp, Schmid, and Urban (2014), financial flexibility is the company's ability to access and restructure its financing with minimum costs. In order for a company to be able to meet its needs and respond to every opportunity in unforeseen conditions, it is necessary to have sufficient capital available. Managers in the company know that a good capital supply is necessary for stable operations and is a significant factor because it determines the company's long-term success (Brigham & Houston, 2001).

Companies with a high level of financial flexibility tend to have less debt because the company will try to increase the flexibility of the company by minimizing the need for external financing (Beattie, Goodacre, & Thomson, 2006). This means that if a company has a sudden need or a profitable investment opportunity arises, then the company does not need to seek external funding. Companies with a high level of financial flexibility tend to experience a lower impact in the event of a crisis than companies with a low level of financial flexibility (Bancel & Mittoo, 2011).

Determining the capital structure can be seen from the level of financial flexibility owned by a company. Therefore, one of the ways when companies can maintain financial flexibility is to adjust the proportion between its own debt and capital (Murti, Achsani, & Andati, 2016). In other words, companies need to consider various factors to determine the optimal composition of the capital structure.

Companies with a high level of financial flexibility have low debt levels relevant to the pecking order theory which says that managers will prefer internal financing over external financing. Financial flexibility is the determinant key of optimal capital structure (Brounen, Jong, & Koedijk, 2006). Empirical evidences by Alipour, Mohammadi, & Derakhshan (2015); Margaretha & Ginting, (2016); and Agustawan, Efni, & Gusnardi, (2021) reveal that financial flexibility has a negative effect on the capital structure of a company. Based on this description, the hypothesis is formulated as follows:

H₁: Financial flexibility has a negative effect on the company's capital structure.

Business Risk

Business risk can be defined as the risk that will be experienced by the company due to uncertain profits and the nature of the business itself. According to Brigham and Houston (2001), business risk is the uncertainty in predicting the level of return on assets (ROA) in the future. Companies that experience problems in liquidity are very likely to enter a period of financial difficulty (Fahmi, 2016). If this happens, the company has a high risk of default. The risk of default refers to the probability that the interest and principal of the loan will not be paid in the promised amount on the due date or will not be paid at all (Ross, Westerfield, & Jordan, 2002).

Business risk is said to be one of the main factors in determining the company's capital structure (Abor & Biekpie, 2009). Determining the composition of the wrong capital structure can bring the company into financial difficulties. Companies that have a high level of business risk have a high probability of default. The trade-off theory explains that companies that have a high level of business risk so that they have a high probability of going bankrupt should not have a lot of debt (Wiwattanakantang, 1999).

Companies with a high level of business risk tend to avoid using external funding and rely more on company internal funding to prevent bankruptcy (Alipour, Mohammadi, & Derakhshan, 2015). This is in line with the pecking order theory that companies with a high level of business risk will reduce the use of external funds in the form of debt. The smaller the business risk a company has, the debt will increase because the company tends to be trusted by outsiders to lend funds (Hendra & Rowena, 2021).

Based on the explanation above, with increasing business risk, companies tend to reduce the use of debt and the other way around if the business risk decreases. The company will reduce the use of debt due to the level of risk. A high business has a high probability of bankruptcy risk as well. Therefore, companies must find and determine the optimal capital structure that can balance debt and equity. Business failure can be minimized if a company has a good proportion of capital structure. Empirical evidences by researches by Friend & Lang, (1988); Eldomiaty, (2007); Abor & Biekpe, (2009); Alipour, Mohammadi, & Derakhshan, (2015) reveal that business risk has a

negative effect on the company's capital structure. Based on this explanation, the second hypothesis proposed is:

H₂: Business risk has a negative effect on the company's capital structure.

Asset Structure

In addition to financial flexibility and business risks faced by the company, asset structure is the other factor to be considered by management in determining the composition of the capital structure. Assets are resources owned and used to achieve company goals. Assets are defined as resources that have the potential to provide benefits to the company in the future. According to Hanafi and Halim (2016), resources capable of generating cash inflows or the ability to reduce cash outflows can be referred to as assets.

Companies that have high assets have more assets to be used as collateral to pay debts in the event of bankruptcy, so they will have a greater ability to attract more debt (Alipour, Mohammadi, & Derakhshan, 2015). External funding in the form of debt will provide benefits to the company in the form of tax reductions due to interest costs. Based on this, the cause of companies tends to use more debt in the hope of increasing company profits. Another advantage, if the company has high assets that it does not experience difficulties if they want to make a loan.

Companies that have high assets can use their assets as collateral to obtain debt from external sources. This is in line with the trade-off theory which explains that a company with more tangible assets will have a high level of debt because the company has many assets that can be used as collateral to pay debts so that the company will have the ability to use more debt (Sofat & Singh, 2017).

Companies with high assets are more trustworthy in obtaining loans from outside parties compared to companies with low asset levels. This is because the risk of bankruptcy is lower and still has collateral for debt in the form of assets owned (Alipour, Mohammadi, & Derakhshan, 2015). Empirical evidences by Al-Najjar & Taylor, (2008); Viviani, (2008); Teker, Tasseven, & Tukul, (2009); Alipour, Mohammadi, & Derakhshan, (2015); and Sofat & Singh, (2017) show that the asset structure has a positive effect on the company's capital structure. Based on this description, the following hypothesis can be formulated:

H₃: Asset structure has a positive effect on the company's capital structure.

Methods

The research method is causal research with a panel regression model. The data collection technique used in this research is a documentary study. The data used in this study is secondary data in the form of annual reports from each company taken from: www.idx.co.id. The population in this study is the Energy Sector Companies on the Indonesia Stock Exchange, amounting to 69 companies. The sampling technique was purposive sampling with the criteria of companies that had an IPO before 2012 and were not suspended during the analysis period so that a total of 33 samples of companies were obtained.

Measurement of financial flexibility as in Alipour, Mohammadi, & Derakhshan, (2015) is by comparing retained earnings to the company's total assets. Business risk variables are calculated by using the standard deviation of return on assets (ROA) (Alipour, Mohammadi, & Derakhshan, 2015). Furthermore, the asset structure is measured by comparing the total fixed assets with the company's total assets (Sofat & Singh, 2017).

Findings

Descriptive Statistical Analysis

Table 1 presents the results of descriptive statistics for all variables used in this study. Based on Table 1, the standard deviation of financial flexibility of 0.9468278 shows the varying ability of companies in the Energy Sector Companies on the IDX to adapt to unexpected needs and opportunities in the future. There are companies in this sector that are able to guarantee profit persistence (minimum business risk value is 0.0083). Averagely, the company has fixed assets as much as 0.659473 times compared to its total assets. From the overall data, the highest DER value is 34.0556 indicates that there are also companies that use high debt in carrying out operating activities and the company's sources of capital tend to be very dependent on outside parties.

Table 1. **Summary of Descriptive**

Variable	Minimum	Maximum	Mean	Std. Deviation
FLEX	-9.3679	1.0576	-.024425	.9468278
RISK	.0083	.6811	.089495	.1087838
ASST	.0701	.9793	.659473	.1823034
DER	-15.8173	34.0556	1.810407	4.1149816

Univariate Test

Table 2 presents the results of the correlation test. The matrix aims to show univariate associations between two variables. The correlation between the dependent variable and the regressor variable (ASST, RISK, FLEX) shows that the large asset structure and small business risk correlate with the debt-based capital structure. It is just that financial flexibility (FLEX) does not have a significant correlation with capital structure.

This study uses a Variance Inflation Factor (VIF) approach to determine the violation of multicollinearity between independent variables. Each variable that has a VIF below 10 indicates that there is no multicollinearity violation.

Table 2. **Correlation Matrix**

	DER	ASST	RISK	FLEX	VIF
DER	1				
ASST	0.2420*	1			1.04
RISK	-0.1294*	-0.1807*	1		1.93
FLEX	0.0283	0.0497	-0.6792*	1	1.88

Hypothesis Testing

The regression model of this study was first tested for classical assumptions, including multicollinearity, normality (Jarque-Berra test), autocorrelation (Wooldridge test), and heteroscedasticity (Wald Test). Then, the reliability of the estimation model was also tested with the Chow test, Breusch Pagan LM test, and Hausman test. Overall, the panel regression model used is the Fixed Effects panel model. Because there is an autocorrelation problem, the standard errors in the Fixed Effects panel are clustered using the White-Test approach.

For the problem of reliability of the estimation model, Table 3 shows the value of the correlation coefficient (R^2) is 0.16. This value indicates that the capital structure can be explained by the three independent variables by 16.8 percent and the rest is explained by other factors which are not examined. The F value is indicated by the number 3.55, which means that the regression model in this study is feasible to be used as a research model.

Table 3. Panel Regression Results

	Beta	Standard Error
FLEX	0.36**	0.13
RISK	-9.551*	5.029
ASST	2.434	3.545
Constant	1.069	2.4
BP LM test (X^2)	1.95***	
Hausman Fixed (X^2)	8.99***	
Year Dummy	Yes	
R^2	0.168	
<i>F-Value</i>	3.55***	

*Notes: *, **, *** indicate a significance level of 10%, 5%, and 1%*

Meanwhile, for the regression test of each hypothesis, Table 3 displays that financial flexibility has a positive relationship with capital structure ($\beta= 0.36$; $SE=0.13$). This means that on every increase in financial flexibility, the capital structure also changes and has a tendency to a debt capital structure. Econometrically, in every increase of one unit in financial flexibility, the company's capital structure will change to debt financing by 0.36%.

Companies with high financial flexibility signify the availability of adequate capital so they tend to require less debt financing. This is in accordance with the pecking order theory which states that companies have a funding order in making financing decisions (Kontesa, 2015). The flexibility of the company's financing indicates large access to financing. With this great access, the company will choose cheaper financing. Theoretically, debt financing is cheaper financing. Hence, with high financial flexibility, companies will tend to increase debt financing.

Meanwhile, business risk has a negative impact on capital structure ($\beta= -9.551$; $SE=5.029$). This means that with every increase in business risk, the capital structure also changes significantly and leans towards equity capital structure or avoiding debt financing. Econometrically, for every one unit increase in business risk, the company's capital structure will change to equity financing and reduce debt financing by 9.55%.

The results obtained from this test indicate that business risk influences capital structure, only at a significance level of 10%. Energy Sector Companies on the IDX with high business risks do not always avoid using external funds or rely more on internal funding. This is because the company still needs and uses external funding sources to carry out its operations. The optimal proportion of capital structure can be achieved when the company can balance the amount of debt and equity used. When a balance occurs, the use of debt can have a tax-saving effect (trade-off theory). In addition, increasing the debt portion can reduce agency costs because it increases external monitoring from creditors to management. Therefore, every management action tends to improve the company's welfare.

As an additional note, the last major variable in this study, namely asset structure, does not have a significant effect on capital structure. This means that changes in the asset structure will not significantly change the size of the capital structure.

Overall, this analysis aims to examine how significant the influence of financial flexibility, business risk, and asset structure have on the company's capital structure. Based on Table 3, the form of a multiple linear regression equation can be built as follows:

$$Y' = 1.069 + 0.36X_1 - 9.551X_2 + 2.434X_3 + e$$

Conclusion

The test results show that financial flexibility has a positive influence on the company's capital structure, while business risk has a negative influence. Lastly, asset structure has no effect. The limitation in this study lies in the measurement of capital structure which uses total debt as a whole so that it cannot show the dominant amount of long-term debt and the object of this research is limited. Some suggestions for further research are to use the long-term debt for measuring capital structure, to expand the object of research, and to consider growth rate variables that are thought to influence financing decisions because companies with fast growth rates tend to need external funds.

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THE EFFECT OF ORGANIZATIONAL COMMUNICATION ON EMPLOYEE PERFORMANCE WITH JOB SATISFACTION AS AN INTERVENING VARIABLE AT PT KALBAR JAYARAYA PONTIANAK

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Abstract. This study aims to determine the effect of organizational communication on employee performance and on job satisfaction, the effect of job satisfaction on employee performance and the influence of the role of job satisfaction as a intervening variable between organizational communication and employee performance. This research was conducted with a *Structural Equation Modeling* (SEM) approach with *Partial Least Squares* (PLS) analysis using SmartPLS 3.0 software. The data collection was by the study of documentation. The population in this study was 32 employees of PT Kalbar Jayaraya Pontianak and was taken with probability sampling. Based on the results of the study, it can be concluded that: organizational communication to job satisfaction has a positive and significant effect by obtaining a p-value of $0.000 < 0.05$. Organizational communication to employee performance has a positive and significant effect by obtaining a p-value of $0.032 < 0.05$. Job satisfaction with employee performance has a positive and significant effect by obtaining a p-value of $0.010 < 0.05$. Organizational communication to employee performance through job satisfaction as a intervening variable has a positive and significant effect by looking at the p-value of $0.042 < 0.05$.

Keywords: organizational communication, job satisfaction, employee performance

Introduction

Human resource is one of the most important factors in a company besides the assets and capital in order to support the company's defense in the midst of business competition. Therefore, it must be managed properly to improve the company's performance and effectiveness.

Human resource management is in charge of formulating and implementing policies for human resources in order to produce employee competencies and behaviors needed by the company to achieve its strategic goals. Therefore, it is necessary for the company to know the performance of the employees so that the company can achieve the strategic goals from its objectives.

No individual, group or organization can survive in the absence of communication. Communication is needed so that the other person or the recipient can understand well the meaning of the communication giver to create good communication between two or more people. It is also a means to convey the goals and ideas of the company so that it can be implemented by employees to prevent misunderstandings from one to another.

A company needs to also pay attention to job satisfaction. Employee job satisfaction is influenced by the results obtained or expected to be obtained. If the results obtained or expected are not in accordance with what is obtained, the employee does not feel satisfied with his work. This is very important because it will be able to influence the attitude of employees in the work environment.

The company certainly hopes that the results of communication and job satisfaction can improve the company's performance to make it better, which of course is followed by employee performance. Employee performance can be seen from the results of work in terms of quality and quantity that have been achieved by employees in carrying out their duties in accordance with the responsibilities assigned to them.

Literature Review

Organizational Communication

Conveying a meaning, information and ideas is certainly not just conveying to a recipient, but it is hoped that our delivery can be understood by the recipient so that good communication can be created between the giver and the recipient of information.

Communication is the exchange of information or messages between the communicator as the sender and the communicant as the recipient, either directly or indirectly carried out in two directions (Busro, 2018: 207). Communication is the transfer of information and understanding from one person to another (Davis (1985) in Mangkunegara, 2017:145). It is defined as the process of sending and delivering messages to achieve mutual understanding. Effective communication occurs when individuals reach a common understanding, stimulate others to take action and encourage people to think in new ways (Noor, 2013:207).

Communication is an activity that causes others to interpret an idea, especially those intended by the speaker or the writer (Flippo (1976) in Mangkunegara, (2017:145). It is a movement and understanding with four main functions, namely as control, motivation, emotional statements and information (Robbins *and* Judge, 2018: 223). Also, it is a process that connects one part to another in life where each communication actor will perform four actions, namely forming, conveying, receiving, and processing messages (Noor, 2013: 210).

Communication can be justified as a process that involves individuals in a relationship, group, organization, and society that respond and create messages to adapt to each other's environment (Richard et al. (2009) in Noor 2013:208). It is a process through which a communicator conveys words as stimuli with the aim of changing or shaping the behavior of other people (Dwyer (2005) in Noor 2013: 208). Communication terminologically refers to the process of conveying a statement by someone to others (Noor, 2013: 207).

There are several types of communication often carried out in an organization according to Robins and Judge (2018: 225), namely:

1. Downward Communication

Downward communication is communication that flows from one level of a group or organization towards a lower level. These communications are used to assign goals, provide job instructions, explain policies and procedures, point out issues that require attention, and offer feedback.

2. Upward Communication

Upward communication is communication that goes to a higher level within a group or organization. This communication is used to provide feedback to the higher-ups, informing them about the progress of the objectives and the delivery of the problem.

3. Lateral Communication

Lateral communication is communication that occurs between members of a working group at the same level, managers at the same level or several other horizontally equivalent workers. This communication saves time and facilitates coordination.

In this study, the dimensions and indicators of organizational communication refer to the theory proposed by Devito (1997) in Suranto (2011), namely:

1. Openness
2. Empathy
3. Supportiveness
4. Positiveness
5. Equality

Job Satisfaction

Someone with a high level of job satisfaction has positive feelings about their work, while someone with low job satisfaction tends to have negative feelings for their work.

Job satisfaction is an individual thing where the more aspects of work that are obtained according to the wishes of the individual, the higher the level of satisfaction felt, and vice versa (Noor, 2013: 257). Job satisfaction is a pleasant or unpleasant emotional state in which employees view their work with a positive attitude or negative attitude and reflect a person's feelings for his work (Sunyoto, 2015: 211). Employee job satisfaction is an important thing that must be created well so that work morale, dedication, love and discipline of employees increase (Hasibuan, 2020: 202).

According to Robbins (2008) in Busro (2018:101):

Job satisfaction is a general attitude towards a person's work. It is the difference between the number of rewards a worker receives and the number of rewards they believe they should receive. Job satisfaction is a comparison between the results obtained and the expected results. The greater the results obtained compared to the expected results, the more satisfied the employee will be, and vice versa. The smaller the results obtained compared to the expected results, the lower the employee's job satisfaction.

Job satisfaction is a feeling that supports or is not supportive in an employee related to work or his condition (Wexley *and* Yukl, in Noor 2013: 256). It can be satisfactory and not satisfactory. Job satisfaction usually flattens the results of comparisons with some circumstances and there is no absolute assessment in job satisfaction because it is indefinite (Noor, 2013:255).

Job satisfaction is the condition when a person gets something much better and unexpectedly, he will feel very satisfied. A sense of satisfaction is felt by the individual because he gets positive things in his workplace, such as good wage conditions, a sense of security for his guaranteed retirement and awards given in accordance with work achievements (Locke, in Noor 2013: 257). Job satisfaction is an employee's positive feeling about their work resulting from an evaluation of the characteristics in their work (Robbins and Judge, 2018: 46). It is not a mere concept, but rather an understanding that a person can be relatively satisfied with one aspect of his work and insatiable with one or more other aspects of work (Kreitner, in Noor 2013:257-258).

Job satisfaction of a person is assured to the difference between expectations, needs or values and what according to his feelings or perceptions has been obtained or achieved through his work. A person is said to be satisfied when there is no gap between the desired and his perception of reality because the desired minimum has been met (Noor, 2013: 258). It can be concluded that job satisfaction is a situation where a worker feels proud, happy, fairly treated, recognized and cared for by superiors, valued, and safe because his work can produce something that meets the personal needs, desires, expectations and ambitions so that he feels satisfied physically and mentally (Noor, 2013: 258).

Employee job satisfaction according to Noor (2013:258) can be measured by several indicators. These indicators include:

1. Feelings of Pleasure
2. Feelings of Pride
3. Feelings of Guaranteed
4. Confession

Employee Performance

Employee performance can be interpreted as work performance both quantitatively and qualitatively achieved by a person during a certain period (Busro, 2018: 87). In general, performance is often only understood as the quantity and quality of work. Yet, performance is actually more than just quantity and quality but rather the output of a certain set of functions or indicators of a job.

Performance is a job that is successfully shown by workers with earnest efforts in order to fulfill their duties and obligations (Busro, 2018: 87). It is the appearance of work in quality and quantity presented by employees, both individually and in groups in carrying out their duties in accordance with the tasks and functions within the organization and work procedures contained in the organization they follow (Busro, 2018: 87). It is a result of work produced by an employee to achieve the expected goals (Pabundu, in Busro 2018: 88).

Performance is a comparison of work results achieved by employees with predetermined standards (Guritno & Waridin (2005), in Busro 2018: 88). It is the willingness of a person or a group to do an activity and perfect it according to responsibility with the expected results (Rivai (2006), in Busro 2018:88).

Performance is a condition that must be known and confirmed to certain parties to find out the level of achievement of an individual related to the vision carried out by an organization, as well as knowing the positive and negative impacts of an operational policy (Noor, 2013: 270). It is defined as the implementation of the functions required of an employee of the company (Gibson, in Noor 2013: 270). Also, performance is an act, an achievement, an exhibition of skills that can be given from an employee (Whitmore (2004), in Noor 2013:270).

Performance is a record of resulting consequences on the functioning of work or activity over a certain period that relates to the goals of the organization. A person's performance is a combination of ability, effort and opportunity measured from the consequences produced (Noor, 2013: 271). Performance is the result of work that has a strong relationship with the organization's strategic goals, consumer satisfaction and contributing to economists (Amstrong, in Noor 2013: 271). The work performance or achievement of an employee is basically the result of an employee's work during a certain period compared to the possibilities, such as standards, targets / goals, or performance that have been determined in advance and have been mutually agreed upon (Noor, 2013: 272).

The work performance is the result of work in quality and quantity that has been achieved by employees in carrying out their duties in accordance with the responsibilities given to them (Mangkunegara, 2017: 67). It can be concluded that performance is the result of work that can be achieved by employees, both individuals and groups in an organization, in accordance with the authority and responsibility given by the organization in an effort to achieve the vision, mission and goals of the organization concerned by including the ability, perseverance, independence, ability to overcome problems according to the given time limit (Busro, 2018: 89).

The indicators used in measuring performance must be able to represent the results of the work of employees. According to Mangkunegara (2017:75), the indicators in performance measurement include:

1. Working Quality
2. Working Quantity
3. Reliability
4. Attitude

Research Methods

The form of research in this study is associative research. It is a conjecture about the relationship between variables in the population to be tested through the relationship between variables in the sample (Sugiyono, 2017: 224). The purpose of the research model is to look at the magnitude of the influence caused by independent variables on dependent variables.

This research was conducted with a *Structural Equation Modeling* (SEM) approach with *Partial Least Squares* (PLS) analysis. SEM (*Structural Equation Modeling*) is a statistical technique tool to test and estimate causal relationships by integrating factor analysis and path analysis (Jogiyanto and Abdillah, 2016: 2).

PLS is a variant-based structural equation (SEM) analysis that can simultaneously test measurement models as well as structural model testing (Jogiyanto and Abdillah, 2016: 14). PLS is part of a variant-based SEM better known as SEM-PLS. SEM-PLS is a causal modeling approach that aims to maximize the variance of the latent variable of criteria that can be explained by the predictor's latent variable (Sholihin and Ratmono, 2013:7).

The data collection method used in this study is documentation study, which is a data collection technique by studying documents to obtain data or information related to the problem under study (Sugiyono, 2016: 396). There are two ways to collect data, namely primary and secondary. Primary data collection was carried out using collection techniques of questionnaires. Questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to respondents to be answered (Sugiyono, 2016: 230). The scale used in this study is the likert scale. The likert scale is used to measure a person's attitudes, opinions, and perceptions (Sugiyono, 2017: 158). In data collection, the likert scale contains 5 levels of answer preferences, namely: Strongly disagree, Disagree, Neutral, Agree, and Strongly agree.

In this study, the sampling method was probability sampling. It is a sample determination technique in which all members of the population are likely to be used as samples (Sugiyono, 2016: 151). In this study, the sample taken was 32 employees of PT Kalbar Jayaraya Pontianak.

Discussion

Test Measurement Model (Outer Model)

1. Convergent Validity Test

Based on the results of the convergent validity test, it shows that the result of the value of the outer model or the correlation between the construct and the variable is a value of > 0.5 which means that the overall value of the loading factor is greater than 0.5 so that the construct for all variables is valid from the model.

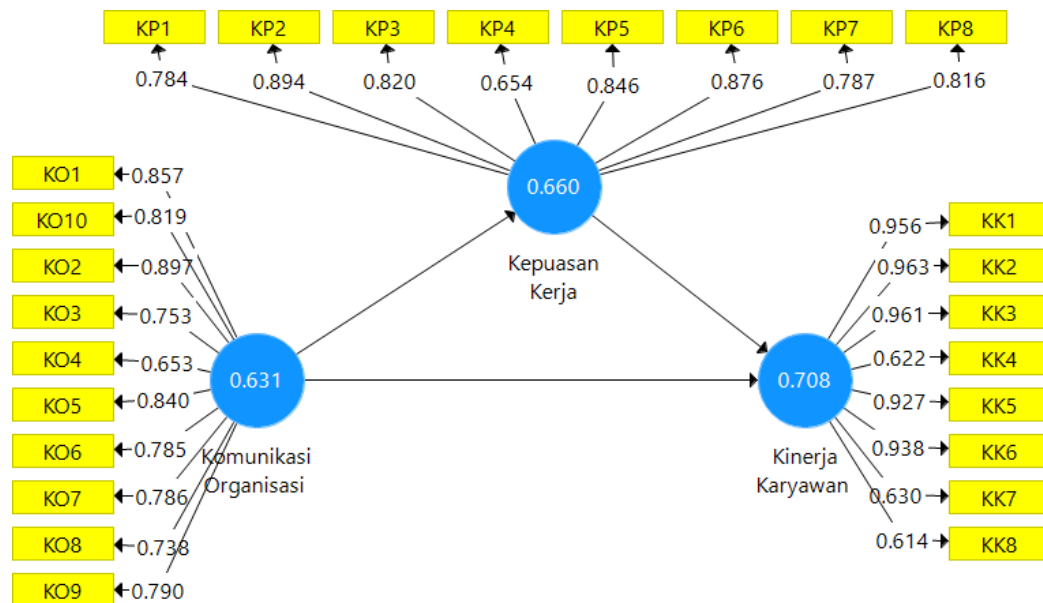


Figure 1
Structural Model Outer Model

The output shows that the loading factor gives a value above the recommended value of 0.5. So, the indicators used in this study have met convergent validity.

2. Discriminant Validity Test

Table 1. Testing the Validity of Discriminants with AVE

Variable	Average Variance Extracted (AVE)
Job Satisfaction	0.660
Employee Performance	0.708
Organizational Communication	0.631

Source: Processed Data from Smartpls (2022)

Based on the results of the discriminant validity test, it shows that the results of all constructs show an AVE value of > 0.50 , so it can be declared valid. Testing the validity of the discriminant can also be seen from the cross-loading value. The cross-loading value that passes the discriminant validity test can be expressed through the cross-loading value of the indicator variable against the latent variable that must be greater in value to other latent variables. Thus, it can be stated that each of them has met the criteria for the discriminant test.

Table 2. Discriminant Validity Testing with Cross Loading

	Job Satisfaction	Employee Performance	Organizational Communication
KK1	0.812	0.956	0.512
KK2	0.827	0.963	0.649
KK3	0.808	0.961	0.618
KK4	0.354	0.922	0.336
KK5	0.804	0.927	0.502
KK6	0.803	0.938	0.666
KK7	0.513	0.930	0.559
KK8	0.516	0.914	0.300
KO1	0.508	0.490	0.857
KO10	0.589	0.539	0.819
KO2	0.530	0.491	0.897
KO3	0.396	0.432	0.753
KO4	0.397	0.317	0.753
KO5	0.540	0.566	0.840
KO6	0.465	0.490	0.785
KO7	0.552	0.503	0.786
KO8	0.528	0.463	0.738
KO9	0.593	0.618	0.790
KP1	0.884	0.659	0.371
KP2	0.894	0.702	0.729
KP3	0.830	0.687	0.582
KP4	0.654	0.494	0.244
KP5	0.846	0.766	0.488
KP6	0.876	0.801	0.625
KP7	0.887	0.642	0.575
KP8	0.836	0.637	0.476

Source: Processed Data from Smartpls (2022)

3. Composite Reliability Test And Cronbach's Alpha Test

Table 3. Composite Reliability Test Results and Cronbach's Alpha Test

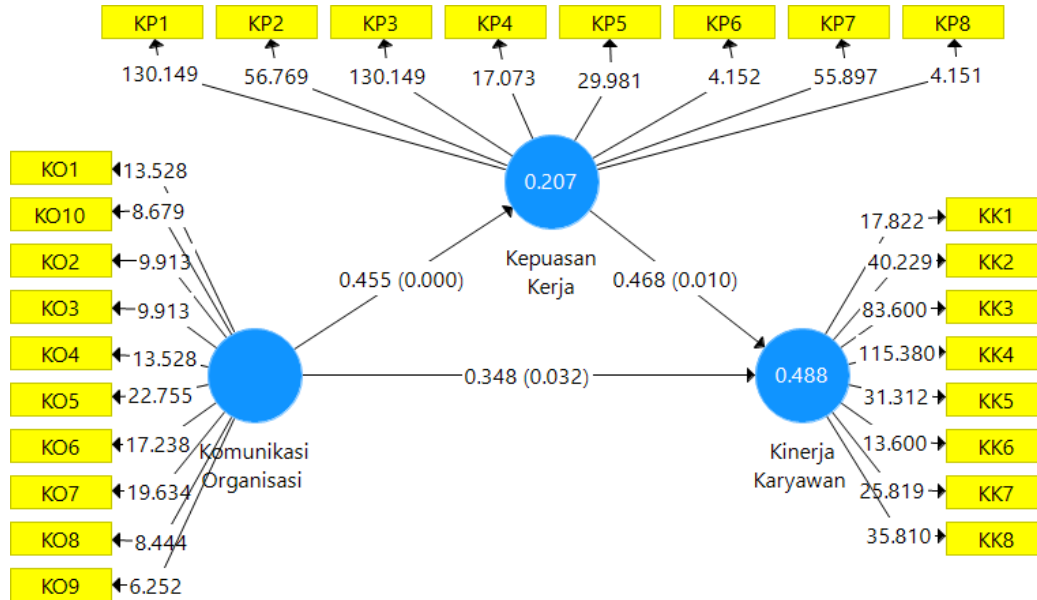
Variable	Cronbach's Alpha	Composite Reliability	Model Evaluation
Job Satisfaction	0.929	0.939	Reliable
Employee Performance	0.936	0.949	Reliable
Organizational Communication	0.934	0.944	Reliable

Source: Processed Data from Smartpls (2022)

Based on the results of the Composite Reliability test and the *Cronbach's Alpha* Test, it shows that all latent variables measured in this study have a *Cronbach's Alpha* value of > 0.6 and the Composite Reliability value of > 0.7. It can be said that all latent variables are reliable.

Structural Model Test (Inner Model)

Figure 2. Structural Model Inner Model



Based on the results of the R-Square value, the Job Satisfaction variable has an R-Square value of 0.207 or 20.7 percent which means that the ability of the Organizational Communication variable in explaining the Job Satisfaction variable is weak / quite limited, which is only 0.207 or 20.7 percent, while the rest of which is influenced by other factors that are not included in this research variable. Then the R Square value of the Employee Performance variable is 0.488 or 48.8 percent, which means that the Organizational Communication and Job Satisfaction variables can substantially explain the Employee Performance variable with a moderate value, that is a value of 0.488 or 48.8 percent while the rest is influenced by other factors that are not included in this research variable.

Table 4. Values of R Square and Q Square

Variable	R Square	Q Square
Job Satisfaction	0.207	0.461
Employee Performance	0.488	0.226

Source: Smartpls Processed Data (2022)

The *Q-Square* result variable of Job Satisfaction is 0.461 and Employee Performance is 0.226 mean greater than 0. So, it shows that the model has predictive relevance. Furthermore, the Goodness of Fit (*Gof*) formula is used to see the quality index which, according to Tenenhaus et al (2004) in Abdillah and Jogiyanto (2015: 216), is obtained as follows:

$$Gof = \sqrt{\frac{Com \times R^2}{3 + \frac{(0.207 + 0.488)^2}{2}}}$$

$$Gof = \sqrt{0.666 \times 0.348^2}$$

$$Gof = 0.284$$

Based on the results of calculating the quality index using Goodness of Fit (Gof), a Gof value of 0.284 is obtained, meaning that the model used in this study has a moderate model prediction.

Mediation Effect Test

The value of the mediation effect can be seen by using the formula from the Sobel Test which, according to Sobel (1982) in Ghozali (2018), as follows:

$$Z \text{ Value} = \frac{P1 \times P2}{\sqrt{(P1^2 \times SE1^2) + (P2^2 \times SE2^2)}}$$

$$Z \text{ Value} = \frac{0.207 \times 0.488}{\sqrt{(0.207^2 \times 0.131^2) + (0.488^2 \times 0.199^2)}}$$

$$Z \text{ Value} = 1.002$$

From the results of the Z value calculation above, the Z value is 1.002 with a significance value of 5%, and the variable is said to be able to mediate between independent variables and dependent variables. The Z value of $1.002 < 1.96$ can be interpreted as a direct influence analysis that can prove that Job Satisfaction is not able to have a significant effect in mediating Organizational Communication on Employee Performance.

Hypothesis Test

1. Direct Influence Analysis

Table 5. Direct Influence Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Organizational Communication -> Job Satisfaction	0.455	0.482	0.131	3.475	0.000
Organizational Communication -employee performance >	0.348	0.383	0.187	1.862	0.032
Job Satisfaction -employee performance >	0.468	0.439	0.199	2.349	0.010

Source: Processed Data from Smartpls (2022)

Based on the test above, the significance value (p) and the path coefficient (β) can be seen. The hypothesis is accepted when the significance value is less than 0.05 ($p < 0.05$), and the hypothesis is rejected when the significance is greater than 0.05 ($p > 0.05$). From the results of hypothesis testing above, it can be concluded that all variables in the analysis of direct influence in hypothesis testing have a positive and significant effect because the p-value is < 0.5 .

2. Indirect Influence Analysis

Table 6. Indirect Influence Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Organizational Communication -> Job Satisfaction -employee performance >	0.213	0.213	0.122	1.739	0.041

Source: Processed Data from Smartpls (2022)

Based on the hypothesis testing, the influence between Organizational Communication on Employee Performance through Job Satisfaction shows an estimated value of 0.213 (positive) and a p-value of 0.041 is smaller than 0.05. Hence, it is concluded that there is a positive and significant indirect influence between Organizational Communication on Employee Performance through Job Satisfaction.

Conclusion

Based on research conducted on the analysis of organizational communication on employee performance with job satisfaction as an intervening variable at PT Kalbar Jayaraya Pontianak, it can be concluded that organizational communication, job satisfaction and employee performance that take place at PT Kalbar Jayaraya Pontianak are good but still need to be improved again, especially in employee job satisfaction at PT Kalbar Jayaraya. From the results of the analysis, it can be concluded that there is a positive and significant influence between organizational communication on job satisfaction, there is a positive and significant influence between organizational communication on employee performance, there is a positive and significant influence between job satisfaction on employee performance, and there is a positive and significant influence between organizational communication on employee performance through job satisfaction as an intervening variable at PT Kalbar Jayaraya Pontianak.

From this conclusion, the author gives several suggestions. First, the superiors/leaders at PT Kalbar Jayaraya Pontianak need to improve organizational communication and pay attention to the job satisfaction of all employees in order to create a good relationship between leaders / superiors and employees so that they can provide comfort at work. Last suggestion for further researchers, it is expected to be able to add variables other than organizational communication, job satisfaction and employee performance, and try other research indicators.

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Competitiveness and Bank Concentration Effect on Stock Price

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Abstract: This study was undertaken to test and analyze the impact of Competitiveness using variable items, including ROA, ROE, CAR, and LDR against price Shares of the Conventional Banking Industry in Indonesia and their tests Concentration of the Conventional Banking Industry Market. This sort of study is quantitative and use quantitative methods. This study's population is conventional or ordinary banking institutions in Indonesia that have been in operation for at least five years and use periodic data. Nonprobability sampling is a sampling approach that does not give equal chances for each element or member of the population to be picked as the sample, and the Saturated Sampling method is used to determine the sample when all members of the population are utilized as samples. The number of research variables in a panel data analysis consist of an independent variable and a dependent variable. According to the findings of this research, the variables ROA, ROE, and CAR have a positive and statistically significant influence on the stock price for each value of t. ROA = 2.42, ROE = 2.65, and CAR = 3.59 with a significance of 0.05. LDR has a substantial negative influence on stock prices with t count LDR = (-2.35) and a significance level of 0.05. With an average score of $788.24 < 1500$, the results of tests on Market concentration indicate that it is not concentrated and effective competition is competitive among banks.

Keywords : Return On Assets, Return On Equity, Capital Adequacy Ratio, Loan to Deposit Ratio, Stock Price, and Market Concentration

1. Introduction

Since the commencement of the program, notably the Indonesian Banking Architecture on January 9, 2004, market concentration, which is normally controlled by a handful of large banks, has become a factor. The objective of the development of the Indonesian Banking Architecture was to provide a comprehensive framework for the future orientation of the Indonesian banking industry. As a result, the Indonesian Banking Architecture program promotes small and medium-sized banks to explore acquisitions and mergers, which is thought to contribute to the diversification of market structure and banking competitiveness in Indonesia. With the growth of new financial services and products, the geography of Indonesia's banking competitiveness is getting increasingly compact. As consumers choose more desirable product options, market concentration tends to change (Khairi & Widayati, 2020).

The differential in banking market structure concentration, or the ensuing disparity in concentration ratio and market share, has a demonstrable effect on the behavior of dominant banks in order to sustain greater gains. Therefore, banking intermediation is inadequate. The banking system continues to prioritize the maximization of corporate profits. Due to funding restrictions, the inefficiency of high bank interest rates prevents the financial sector from fulfilling its role in the economy. Consequently, economic players must comprehend the market structure

in order to apply it effectively to all elements of firm planning and decision-making. Understanding the present market structure enables the bank to execute its profit-generating strategy with the most sensible risk judgments. The bank's risk assessment necessitates conservative cost and profit execution; otherwise, the bank's everyday operations will not be consistent with the need to create profits (Basori & Wahyuningih, 2018).

The market concentration is then utilized to construct a model that quantifies the competitiveness of each bank. According to the Structure-Conduct-Performance (SCP) theory, the industrial structure influences the industry's behavior, and the industry's structure and behavior influence its performance. Bain (1951) was the originator of the SCP technique for detecting if significant market concentration is the result of collusion or other anticompetitive conduct by major corporations. Collusion in the banking industry leads to a concentration of number-oriented banks, which results in anticompetitive activity that leads to client losses due to a lack of options and being compelled to choose from what is available on the market (Scholtens & van't Klooster, 2019) (Malini, 2021b).

Competition is consistent with the growth of Indonesia's banking industry. This aids banks in gaining market share in revenue-generating activities including third-party money collection and lending. Therefore, the competitiveness of banks must be evaluated in this circumstance. The struggle for productive resources, such as deposits, savings, and credit distribution, which are all revenue sources, can lead to competition between banks. In addition, competition might come in the form of goods and services, including novel services supported by technical improvements that can reduce production and delivery costs (Indrajati et al., 2020).

The loss in competition in the Indonesian banking sector as a result of increased banking concentration will have a detrimental effect on profitability, as well as a negative effect on the stability of the country's financial system. There are still gaps / inconsistencies in the above research findings. Consequently, competitive behavior and the amount of banking concentration in Indonesia warrant further investigation and analysis to produce more precise results. (Nguyen, 2020).

In the meantime, the financial system is a prerequisite for economic life, and macroeconomic stability cannot exist in the absence of financial system stability. The 1997/1998 economic crisis in Indonesia and the 2008 global financial crisis have heightened the importance of Financial System Stability to the Indonesian economy. This study focuses on domestic banking, particularly on institutions that play an important role in the sector. Banking on a national scale In this study, the link between the independent and dependent variables is described through explanatory research. This study will also investigate the extent of rivalry in the banking business as well as market structure, or market concentration in this instance. The level of competition in Indonesia's traditional banking sector is a fascinating topic. Consequently, it is essential to investigate the competitiveness of the traditional banking sector. The function of banking is to accumulate economic resources, particularly financial resources, that influence the market structure and economic growth of a nation. The price of stocks exhibits a similar pattern of irregular ups and downs (Malini et al., n.d.).

2. Literature Review

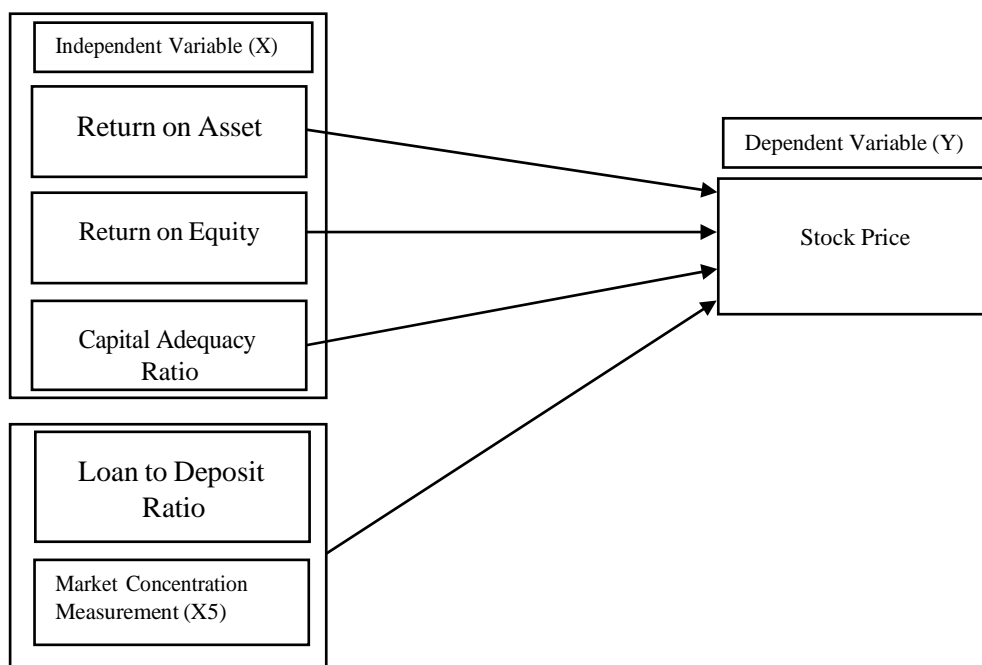
It is vital to calculate the competitive climate in the banking industry. states that in order to execute the company's competitive strategy, the bank must monitor its competitors' every action. Numerous sources, including marketing intelligence and other data sources, might be utilized to identify the activity of these competitors. Banks should be aware of the strengths

and shortcomings of their competitors. Today's business operations must achieve more than operational success in terms of performance. Businesses must adopt distinct competitive tactics to distinguish themselves from competitors (Abonyi, 2005; Malini, 2021a; Zainuldin et al., 2018).

Market structure refers to the number and size distribution of businesses in a market, as well as the ease or difficulty of joining and exiting the market. This market structure represents the characteristics and makeup of the market within the economy, which are affected by a number of internal and external pressures. The primary characteristic of a market is the meeting of buyers and sellers, as well as the progression of transactions involving both price and quantity (Kumar & Prakash, 2019; Prasanto et al., 2020).

Due to the fact that industrial market structure has an effect on the behavior and performance of industry enterprises, it is a critical variable to investigate in industrial economics. As implied by the preceding sentence, market structure has an effect on industry behavior, which in turn has an effect on industry performance. Perfect competition reduces the bank's earnings to zero, and there is no way to generate profits in the future; this is because perfect competition is reduced by the franchise value theory. Bankers' investment selection criteria will be simplified, as they will profit from taking risks in the hope of making more money (Gul et al., 2011; Malini, 2020). In comparison, if a bank possesses market power, the franchise value will be greater. A partial concentration index, consisting of concentrations of the four largest banks, the eight largest banks, and the twenty largest banks, can be used to determine concentration levels. The concentration ratio, also known as the ratio of N firms, is the total amount of market share held by a group of N companies with the biggest market share. The concentration ratio has a value between 0 and 100, with the higher the concentration level, the more likely the structure is to lead to monopoly. If you sort by market share, the first largest company, the second largest 2, and so on, the concentration ratio of n companies (CR_n) is equal to the total market share of the n largest companies (Malini & Putri, 2020).

The concentration ratio (CR) and Herfindahl Hirschman Index were used to calculate total sales (HHI). From the absolute number of numerous significant enterprises in the market, the concentration ratio estimates the percentage of sales in the market. The market concentration graph depicts how much of the market is controlled by a few of the largest corporations. The amount of effect these enterprises have on total sales in the market as a whole is measured by market concentration. Market concentration is one of the market structure indicators that impacts the market's behavior, performance, and level of competition. The more the market concentration, the larger the market power, which will influence the shape of an imperfect competitive market.



3. Methodology

Research Methodology

This research is a quantitative research conducted on the Banking Industry in Indonesia during the 2016-2020 period. The method used in this study is a quantitative method. In this study there are several variables, where the independent variable or the influencing variable is the Competitiveness of the Banking Industry with the research variable items being Return on Assets (ROA) (X1), Return on Equity (ROE) (X2), Capital Adequacy Ratio (CAR) (X3), Loan to Deposit Ratio (LDR) (X4) and Market Concentration (X5), the dependent variable or the affected variable, namely the Stock Price of the Banking Industry in Indonesia during the 2016-2020 period

Data

Using periodic data or a cross-section of banks that have been listed on the Indonesian Stock Exchange, the population of this study is conventional banking with a minimum operating history of at least five years (IDX). This study's sample is the conventional banking industry in Indonesia that is listed on the Indonesia Stock Exchange and has conducted at least five years of banking operations with complete data that can be used as study support. Bank BNI, Bank Mandiri, Bank BRI, Bank BCA, Bank BTN, Bank CIMB Niaga, Bank OCBC, NISP, Bank Sinarmas, Bank BTPN, Bank Danamon, Bank Permata, Bank Bukopin, and Bank Mega were selected based on these criteria; their quality cannot be disputed, as they are the major banks in Indonesia.

Table 1. Operationalization of Research Variables

No	Research Variable	Theoretical Definition of Research Variable	Operational Definition of Research Variable	Indikator
1.	Competitiveness	New types of services and products backed by technological advancements that can reduce distribution and production costs are the mainstays of competitiveness.	Bank competition in Indonesia explains the bank's position.	<ol style="list-style-type: none"> 1. <i>Return On Asset (ROA)</i> 2. <i>Return On Equity (ROE)</i> 3. <i>Capital Adequacy Ratio (CAR)</i> 4. <i>Loan to Deposit Ratio (LDR)</i>

2.	Market Concentration	Concentration is the level of production from a market dominated by a few large firms.	Market concentration which explains the location of the market in the banking industry in Indonesia	1. Herfindahl Hirschman Index (HHI)
3.	Stock Price	The share price is the price that a stock trades at a particular point in time, and it is determined by market participants. The highs and lows of this stock price are determined by the capital market's demand for and offering of shares.	Share prices listed on financial statements and stock exchanges	1. Banking's Stock Price at the end of Period

Source: Developed For Research By Researchers, 2020

Method of Analysis

The approach used in this research is a quantitative descriptive approach. The description of the formula method used in this study includes the independent variables, namely ROA, ROE, CAR, LDR and the dependent variable, namely the stock price, is as follows:

$$Y.\text{stock price} = a + X1.ROA + X2.ROE + X3. LDR + X4. CAR = e$$

Analysis Process

Panel Data Regression Estimation Model Selection The common effect model, fixed effect model, and random effect model can all be used to estimate the slope and intercept coefficients from panel data, according to the description above. As a result, the Chow and Hausman tests are required to determine which of the three models is the best. The goal is to guarantee that the model used to analyze the research variables is accurate.

Statistic test

Coefficient of Determination Test

The coefficient of determination represents the magnitude of the total variation that can be explained by the model, this indicates that the coefficient of determination is able to show the total magnitude of the influence of the independent variable (independent) used on the dependent variable (bound). If the value of R² is close to 1, then the accuracy is more accurate.

F Statistic Test

Simultaneous regression testing using the F statistical test is required to show whether all of the independent variables (independent) in the model have an effect on the dependent (bound) variable. H0 is the hypothesis to be tested, which states that none of the independent variables are significant explanatory variables. The alternative hypothesis (H1) is that all independent factors are important explanatory variables for the dependent variable at the same time.

T . Statistical Test

The t-statistical test shows how much influence an individual independent variable has on the dependent variable. The hypothesis to be tested is H0, which is an independent variable that has no significant effect on the dependent variable. Meanwhile, the alternative hypothesis (H1) is that the independent variables individually (respectively) have a significant effect on the dependent variable.

Market Concentration Measurement

Since the aim of the study is to evaluate a measure of market concentration, absolute and relative measures will be calculated according to the weighting scheme as shown above. The weighting scheme of a number of concentration ratios discussed in this study is based on Marfels as proposed by Bikker and Haaf (2002a), Deltuvaite et al. (2007), and Sharma and Bal (2010). They are as follows:

Table 2. Concentration Measure Features

Concentration Measurement	Concentration Formula	Ratio	Distinctive Features
Concentration ratio of n banks	n $CR_n = \sum_{i=1}^n s_i$	$0 < CR_n = 1$	Take only the big banks into consideration.
HHI	N $HHI = \sum_{i=1}^N s_i^2$	$1/n = HHI = 1$	Consider all banks; be wary of new bank arrival.
Entropy	N $EH = \sum_{i=1}^N s_i \ln s_i$	$0 = EH = \log n$	Based on the information content that is expected from a particular distributor

Relative entropy	$R = EH / \ln N$	$0 < R = 1$	Based on the expected information content of a distribution
Hannan and Kay (HK) Index	N $HK() = \sum_{i=1}^N s_i^2$	$1/s = HK = n$	Sensitive to size distribution; a < 1 emphasizes the influence of small banks and a > 1 emphasizes big bank influence
Comprehensive Industrial Concentration Index (CCI)	N $CCI = s_1 + \sum_{i=2}^N s_i^2 + (1/s_i)$	$0 < CCI = 1$	Overcoming relative dispersion and absolute magnitude
Gini Index	$G = 1 - 2 \int_0^1 L(X) d(X)$	$0 < G = 1$	Accounts of all banks in the market, showing inequality in distribution
variance of the Logarithms	$VL = (1 - N) \sum_{i=1}^N N_i / \log_e(s_i) -$		Show disparity in distribution
(vL)	$s - 2$		
Numbers equivalents (Ne) Ne for HK Ne entropy	$NE HK(a) = (N \sum_{i=1}^N s_i^2) / (1 - a)$ $NE Entropy = eEH$		Reverse size of concentration, show N company same size in an industry

This methodology is based on a set of competition and market power indicators. The HHI index and a set of concentration ratios (CR) are the first two measures. The second measurement is the PR-H statistic and the Lerner index, which are based on econometric estimates and are used to evaluate market structure and pricing strength.

Indeks Herfindahl-Hirschman

Hirschman and Herfindahl (1945) devised IHL as another classic measure of competitiveness and market concentration (1950). This index has served as the foundation for the US Department of Justice's merger rules since 1982. This is then extensively used to determine the degree and structure of market competition:

4. Result and Discussion

There are 13 banks in the traditional banking system that were studied. The information is gathered from the annual financial reports of each conventional bank, which are available on the bank's website, as well as the Indonesia Stock Exchange and reports from the Financial Services Authority. The following table shows the total assets of Indonesian conventional banking.

Table 3. Data on Indonesia's Total Assets in Conventional Banking

BANK	Years (In Trillion)				
	2016	2017	2018	2019	2020
BCA	676,10	750,30	824,80	919,00	1.075,60
BNI	603,03	709,33	808,57	845,61	891,34
BRI	1.004,80	1.127,40	1.296,90	1.416,80	1.511,81

BTN	214,17	261,37	306,44	311,78	361,21
BTPN	91,37	95,04	101,34	181,63	189,90
BUKOPIN	91,37	106,44	96,64	100,26	79,93
CIMB	91,37	266,31	266,78	274,46	280,94
DANAMON	91,37	178,25	186,76	193,53	200,89
MANDIRI	91,37	1.124,70	1.202,25	1.318,25	1.428,34
MEGA	91,37	82,29	83,76	100,8	112,2
NISP	91,37	153,77	173,58	180,7	206,29
SINARMAS	91,37	30,4	30,74	36,55	44,61
PERMATA	91,37	148,32	152,89	161,45	197,72

Source : Indonesia Stock Exchange

There are numerous methods for estimating banking market share, including asset market share, credit market share, and market share of third-party funds. And the market share of assets is used to calculate market share for this study. The sum of banking assets from 2016 to 2020, in addition to data on each bank's total assets, is the next data needed to determine market share for each year in each bank.

Table 4. Bank Asset (2016-2020)

Year	Total Asset (Trillion)
2016	5.729,80
2017	7.387,14
2018	8.068,35
2019	8.562,98
2020	9.177,91

Source : Financial Authority Services

According to the data in table 4, total banking assets will continue to grow between 2016 and 2020. Thus, it may be argued that the Indonesian banking industry continues to thrive. In addition, each bank has its own unique capacity to acquire the assets it desires. In the banking industry market, assets are essential for a bank, and assets are typically viewed as a bank's ability to safeguard the banking system's viability. From assets, one can also notice the market share of each bank, which represents the bank's ability to produce assets.

Table 5. Conventional Banking Market Share Data

BANKS	Market Share				
	2016	2017	2018	2019	2020
BCA	11,80%	10,16%	10,22%	10,73%	11,72%
BNI	10,52%	9,60%	10,02%	9,88%	9,71%
BRI	17,54%	15,26%	16,07%	16,55%	16,47%
BTN	3,74%	3,54%	3,80%	3,64%	3,94%
BTPN	1,59%	1,29%	1,26%	2,12%	2,07%
BUKOPIN	1,79%	1,44%	1,20%	1,17%	0,87%
CIMB	4,22%	3,61%	3,31%	3,21%	3,06%
DANAMON	3,04%	2,41%	2,31%	2,26%	2,19%
MANDIRI	18,13%	15,23%	14,90%	15,39%	15,56%
MEGA	1,23%	1,11%	1,04%	1,18%	1,22%
NISP	2,41%	2,08%	2,15%	2,11%	2,25%
SINARMAS	0,54%	0,41%	0,38%	0,43%	0,49%
PERMATA	2,89%	2,01%	1,89%	1,89%	2,15%

According to Table 5, each bank's market share capabilities are unique. And from 2016 to 2020, Bank BRI will have the largest market share in Indonesia. Bank BRI has the ability to maintain its position at the top of the banking industry's market share, followed by other banks that want to be at the forefront of competition in Indonesia's conventional banking industry.

Tabel 6. Herfindahl-Hirschman Index (HHI) Data for Conventional Banking in Indonesia

Year	HHI
2016	948,90
2017	704,93
2018	728,51
2019	767,54
2020	791,31

Sumber: Data Olahan (2021)

Table 6 demonstrates that the data yields numbers for each year, namely 2016 through 2020. For the category of market share using the Herfindahl-Hirschman Index approach, a Herfindahl-Hirschman Index (HHI) 1500 is classified as not concentrated with market competition, specifically competitive effective competition or monopolistic competition. 1500 HHI 2500 is classified as fairly concentrated with market competition, namely monopolistic competition or oligopoly. And if the HHI is greater than 1,500, it is classified as highly concentrated with competition, i.e. oligopoly, dominating firm with competitive fringe, or monopoly.

The outcomes of the fifth test of hypotheses (5): Market Concentration in Indonesia's traditional banking business.

Based on the data in the table, 2016 is classified as not concentrated with an effective competitive market or monopolistic competition with a value of $948.90 < 1500$. With a value of $704.93 < 1500$ in 2017, it is classified as non-concentrated with a competitive market or monopolistic competition. With a value of $728.51 < 1500$ in 2018, it was classified as non-concentrated with a competitive market or monopolistic competition. With a value of $767.54 < 1500$ in 2019, it was classified as non-concentrated with a competitive market or monopolistic competition. With a value of $791.31 < 1500$ in 2020, it is classified as a non-concentrated market with effective competition or monopolistic competition. The mean (average) value is 788.24, which indicates that 13 conventional banks from the 2016-2020 HHI level suggest that the market structure of conventional banking is not monopolistic and includes a competitive market.

Research Discussion

Based on the outcomes of data processing, the results of this investigation were generally positive. This may be observed in the test results of each instrument, which display data with a high degree of significance. In this discussion, the researcher will detail, one by one, the variables that were investigated. The Influence of Competitiveness (X1) on Stock Prices (Y) in the Indonesian Conventional Banking Industry.

According to the test results for the first hypothesis, the competitiveness variable has a considerable impact on the stock price of Indonesia's conventional banking business. The significance of the test results for each item of the competitiveness variable, namely ROA (Return on Assets), ROE (Return on Equity), CAR (Capital Adequacy Ratio), and LDR (Loan to Deposit

Ratio), suggests that competitiveness has an effect or link with stock prices. This impact will be discussed in the subsequent section:

Return on Assets (ROA) is a ratio that describes a company's capacity to create profits from its assets. Return on Assets (ROA) gauges how a company's profits utilize all of its assets. The greater the ROA, the greater the profitability. In other words, the higher the ROA, the more productive the company's assets are at generating profits. ROA's high value will pique investors' interest and boost their confidence in the company as an investment opportunity. The improvement in the company's attractiveness makes it more enticing to investors because the rate of return will be higher.

The results of this study indicate that the ROA value is directly proportional to the stock price. In other words, the increasing ROA value means increasing the company's stock price. Based on the test results, it is known that the Return on Assets (ROA) has a significant positive effect on the Stock Price of Conventional Banking in Indonesia. The existence of a positive influence indicates that an increase in the value of ROA will cause an increase in the Stock Price of Conventional Banking in Indonesia. The opposite is also true. That is, when the ROA value decreases, it will cause the stock price of conventional banking in Indonesia to decrease. The results of this study are supported by (Elias & Malini, n.d.) with the results of this study which suggests that ROA has a positive effect on stock prices. This shows that an increase in the value of ROA means an increase in stock prices and vice versa when the value of ROA decreases it will decrease the stock price. A positive ROA value indicates that the company is able to generate profits from the assets they have and can maximize the profits earned.

Return on Equity (ROE) is a ratio to measure the level of profitability of a company, which measures the company's ability to generate profits. This ratio measures the company's efficiency in generating profits through its equity (own capital). For shareholders, the higher this ratio, the better because it provides a greater rate of return for shareholders. This ratio can be calculated by dividing net income by the total equity of the company. Based on the results of research testing, it is known that Return on Equity (ROE) has a significant positive effect on Stock Prices of Conventional Banking in Indonesia. The existence of a positive influence indicates that when the ROE value increases, it will cause an increase in the Stock Price of Conventional Banking in Indonesia. The opposite will also happen. When the ROE value decreases, it will cause the Share Price of Conventional Banking in Indonesia to also decrease.

This research is supported by research conducted by (Helma Malini Giriati Giriati, 2021; Shehzad et al., 2010) that ROE has a significant positive effect on stock prices. This means that an increase in the value of ROE will also increase the stock price and conversely a decrease in the value of ROE will result in a decrease in stock prices. This effect occurs because the ROE value shows the ratio of the company's ability to maximize the profits obtained from its capital. Of course, the higher the ROE value will increase investor confidence in investing and is also directly proportional to the increasing share price as well.

Capital Adequacy Ratio (CAR) is a capital ratio that shows the bank's ability to provide funds for business development purposes and accommodate the possible risk of losses caused in bank operations. The greater the ratio, the better the capital position. Capital Adequacy Ratio (CAR) is the ratio used in the company's decision making. The higher the Capital Adequacy Ratio (CAR), the better the bank's ability to bear the risk of any risky credit/productive assets. However, a capital that is too large will affect the bank's profit, while a profit that is too small will affect the bank's expansion.

The results of this study indicate that the CAR value is directly proportional to the stock price. In other words, the higher the CAR value, the higher the company's stock price. Based on the test results, it is known that the Capital Adequacy Ratio (ROA) has a significant positive effect on the Stock Price of Conventional Banking in Indonesia. The existence of a positive influence indicates that an increase in the CAR value will lead to an increase in the Stock Price of Conventional Banking in Indonesia. The opposite is also true. That is, when the ROA value decreases, it will cause the Stock Price of Conventional Banking in Indonesia to decrease. The results of this study are supported by (Guru et al., 2002) with the results of this study which suggests that CAR has a positive effect on stock prices. This shows that an increase in the CAR value will result in an increase in stock prices and vice versa when the CAR value decreases, the stock price will decrease. A positive CAR value indicates that the company is able to provide funds for business development purposes and accommodate the possible risk of loss caused in bank operations. Discussion on the Effect of Loan to Deposit Ratio (LDR) on Share Prices of the Conventional Banking Industry in Indonesia.

LDR (Loan to Deposit Ratio) is a measurement of all loans provided with third party funds as an effort to assess bank performance. The higher the Loan to Deposit Ratio (LDR), the company's profit will increase (assuming the bank is able to channel credit effectively, so the number of bad loans will be small). The results of this study indicate that the LDR value is inversely proportional to stock prices. In other words, the higher the LDR value means the lower the company's stock price. Based on the test results, it is known that the Loan to Deposit Ratio (ROA) has a significant negative effect on the Stock Price of Conventional Banking in Indonesia. The existence of a negative influence indicates that an increase in the LDR value will cause a decrease in the stock price.

Conventional Banking in Indonesia. The opposite is also true. That is, when the LDR value decreases, it will cause the Stock Price of Conventional Banking in Indonesia. increased.

The results of this study are supported by (Peni & Vähämaa, 2012) with the results of this study which suggests that LDR has a negative effect on stock prices. This shows that an increase in the LDR value means that it actually results in a decrease in stock prices and vice versa when the LDR value decreases, it will increase the stock price. With a high Loan to Deposit Ratio (LDR), the credit to be disbursed is also high, although the credit disbursed is very high, it will add profits to the company, but the possibility of uncollectible receivables is also high so that the value of the company will also decrease.

Market concentration is frequently used as an indicator to determine market structure. The ownership or control of a large number of economic resources by a small number of economic actors is the definition of market concentration. By understanding the level of concentration in a given industry, the market structure can be calculated. Measurement of concentration can also be used to determine the concentration of ownership of resources or assets among individuals in a market or the entire economy, the concentration of control or management control over resources or income in the economy, and the concentration of control over company activities in an industry. If industry concentration increases, the level of competition between firms will decline. Conversely, as concentration declines, the level of rivalry between businesses rises. In this instance, the concentration decreased as a result of new entrants, whereas it increased as a result of exits and mergers.

The Herfindhal index is an additional significant concentration measure. The Herfindhal index is calculated by adding the squares of the market shares of all companies in the industry. If the value is close to zero, market concentration is low and there are a wide number of enterprises of comparable size in the industry. In contrast, an industry is a monopoly if its value equals one. The greater the HHI number, the greater the company's size distribution.

Based on the research data gathered in 2016, the market was classified as non-concentrated and competitive or as monopolistic. In 2017, it was classified as a non-concentrated market with effective competition or monopolistic competition. In 2018, it was classified as a non-concentrated market with effective competition or monopolistic competition. In 2019, it was classified as a non-concentrated market with effective competition or monopolistic competition. In 2020, it will be classified as a non-concentrated market with effective competition or monopolistic competition. For the average value (mean) of $788.24 < 1500$, it can be concluded that the market structure of conventional banking is not concentrated and includes an effective competitive market for 13 conventional banks from 2016-2020.

5. Conclusions

Based on the testing and analysis results of the Competitiveness variable with the research variable items, namely Return On Assets (ROA) (X1), Return On Equity (ROE) (X2), Capital Adequacy Ratio (CAR) (X3), Loan to Deposit Ratio (LDR) (X4) on Stock Prices (Y) of the Conventional Banking Industry in Indonesia as well as testing the Concentration of the Conventional Banking Industry Market in Indonesia using the help of Panel Data Analysis test tools and Herfindahl Hirschman Index with test tools using Eviews.

The Concentration of the Conventional Banking Industry Market in Indonesia demonstrates that the average value obtained from 2016 to 2020 is equal to the HHI level, indicating that the market structure of conventional banking is not concentrated and is part of a competitive market. In 2016, it was classified as having an unconcentrated market with an effective competitive market or as having monopolistic competition. It was classified as not concentrated with an effective competitive market in 2017 or as monopolistic competition in 2017. It was classified as not concentrated with an effective competitive market in 2018 or as monopolistic competition in 2018. It was classified as non-concentrated in 2019 due to the absence of an effective competitive

market or monopolistic competition. It is classified as not concentrated with an effective competitive market or as having monopolistic competition in 2020.

To ensure that the conventional banking industry pays attention to the fact that ROE, ROA, and CAR all have a positive and significant effect on stock prices, the conventional banking industry as a business entity should act profitably and efficiently in order to increase profitability and be able to provide loan funds. for the benefit of society. The findings of this study provide information and input to players in Indonesia's conventional banking industry, encouraging them to constantly improve performance and maximize their capabilities in order to produce positive results and ensure the company's stability in the future.

Future researchers should consider the limitations of this study so that additional research can be developed with reference to several aspects to improve this research, such as increasing the number of companies and their observations to provide additional context for the research.

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The Effect of Competitive Prices and Service Quality on Impulse Buying at Pontianak Idol Minimarket

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Abstract: The growing number of retail outlets has caused intense competition between retailers in Pontianak. The big number of outlets in an area provides many alternative shopping places so that attracting customers is a challenge for the retailers. The purpose of this study is to analyze the influence of competitive prices and service quality on impulse buying at Pontianak Idol Minimarket as an effort to attract customers to purchase and increase sales volume. The sampling method uses accidental sampling with 120 respondents. The data collection instrument is by distributing questionnaires. The data were analyzed with SPSS analysis program version 26. The results of the coefficient of determination test show that the variables of competitive prices and service quality affect impulse buying at Pontianak Idol Minimarket by 31.3% while the other 68.7% is influenced by other variables. The results of the T test explain that the variables of competitive price and service quality have a significant effect on impulse buying at Pontianak Idol Minimarket.

Keywords: price, service, impulse buying

Introduction

People's need for household retail products is increasing from time to time, especially the needs of food and beverages, clothing, and household appliances. People's demand for household products is very diverse according to income, age, livelihood, and demographics. This diverse demand is seen as a promising business opportunity by businessmen and they open retail stores as a means to generate profits by meeting the needs of these consumers. The increase in retail stores in an area causes a high level of competition, so that people have many options to choose a retail store as a place to shop. More and more existing retail stores will result in consumers' making purchases of necessary daily needs or unwittingly also doing unplanned purchasing.

People have many considerations in choosing a place to shop, such as getting products at lower prices, having good service, being served kindly by employees, and getting help when looking for a product. These factors must be given by business owners to make consumers shop and do impulse buying. Impulse buying is an unplanned and irrational purchase and is carried out spontaneously due to a strong impulse to buy immediately and a positive feeling towards a product or service. Purchases based on impulse occur more with attention and ignore negative consequences. Impulsive buying behavior can be an opportunity for marketers to increase their sales volume.

Price is an amount of money charged for a product that is exchanged by consumers or the advantages that the product has. Price is one of the determinants of consumers' purchasing. Competitive price is said to be worthy if consumers feel that the sacrifices incurred are in accordance with the benefits of the obtained product. Another factor is that good service quality can also be the emergence of impulse buying. The quality of service includes all non-physical facilities offered by a company to consumers. Service is an appearance performance, which is intangible and lost quickly and more capable in participating actively in the process of consuming products and services by consumers.

Literature Review

Competitive Price

Price is a value that must be borne by consumers to get the right of ownership and benefits of a product or the right to observe a service offered by the seller. It is included in the 4P (product, price, place, promotion) and 7P (product, price, place, promotion, people, progress, and physical evidence). It is also one of the important factors for consumers in buying a product or service. Price is one of the variables that must be controlled correctly because it will greatly affect several aspects of the company's activities, regarding sales activities and aspects of profits expected by the company. It plays an important role as a burden measurement the consumers must bear regarding the products and benefit that they get. Competitive price is an equivalent or lower value than that of competitors that must be borne by the customer to obtain ownership rights to a product (Arfianti, 2015). Meanwhile, Pelealu (2015) states that competitive price is a price that is considered worthy by customers because it is comparable to the given sacrifices with the quality and received benefits and is compatible with similar business competitors.

Determining a pricing strategy is an important element that must be considered properly by every businessman. Many of them are still unable to determine the right pricing strategy. Not many even suffer losses due to this. Low pricing without price discrimination is stated by Utami (2018:307) as the cheapest pricing, line pricing, and odd pricing. Low prices can make customers feel that the money they spend is less than planned, giving the perception that customers still have enough purchasing power to buy unplanned products.

However, the opinion mentioned by Pelealu (2015) states that competitive prices are not only low pricing. Low prices but poor quality can also make a business bad in the eyes of customers. On the other hand, overpricing will make customers reluctant to just visit, let alone make any purchase. Pricing has many purposes. In general, it aims to find a profit so that the company can run. However, the increasingly fierce competition makes it difficult for companies to achieve maximum profit.

Abubakar (2018:46) mentions that the pricing objectives are profit-oriented goals, volume-oriented goals other than profit, corporate image-oriented goals, and price stabilization goals on the market. Reven and Ferdinand (2017), Putri and Ferdinand (2016), Hanifah et al (2019) state that competitive price indicators are prices that correspond to product quality, price suitability with market prices, and price levels.

Quality of Service

Impulse buying is almost exclusively controlled by stimulant. An impulsive buying consumer is most likely open and flexible to a sudden or unplanned idea of purchasing. So, consumers who have those tendency are most likely to respond positively and immediately in buying with the stimulation of products, store services, or the store environment (Hidayat, 2016). The service or benefit provided by the company to other parties is basically intangible and cannot be possessed (Rangkuti, 2017). Service quality is a presentation of products or services that are in accordance with minimarket standards. Efforts to deliver these products and services equal to consumer's expectations or beyond (Hutami, 2018).

Service quality is one of the important aspects in business because it adds value for minimarkets. Fast and swift service will make consumers feel comfortable when shopping (Putri dan Prihatini, 2015). According to Tjiptono and Chandra (2016: 123), there are great benefits for minimarkets if they are able to carry out well services to consumers, such as being able to satisfy consumers, increasing consumer's loyalty, increasing sales of minimarket products and services, and increasing sales volume and profits of minimarkets for its continuity. Rangkuti (2017) states that the services

provided to customers must be provided well so that their satisfaction will be higher. Customer's satisfaction is one of the signs of whether a company is healthy or not. Customers who are satisfied with the provided services will be loyal to the company and will ultimately increase the company's profitability. A carefully provided service will give customers excellent experience when shopping.

Lovelock (2014:154) states that service quality has five dimensions. The first is Tangibles, which are physical facilities that can be felt directly by consumers, or facilities that can be used by customers when shopping. The second is Reliability, which means that the services provided must be in accordance with what has been promised, trust-worthy, and accurate. The third is Responsiveness, which means that the services provided by the company to customers should be fast and precise and the given information must be clear. Next is Assurance, where knowledge, courtesy, and employees' skills must be able to foster consumer's trust toward the company by having sufficient knowledge about the product, delivering courtesy while providing information, and being able to convince consumers. Lastly, Empathy is providing friendly service, understanding consumers, and good communication that must be possessed by every employee to make consumers feel comfortable. In brief, Lovelock (2014:154) states that the indicators of service quality are tangibles, reliability, responsiveness, assurance, and empathy.

Impulse Buying

Impulse buying is an unplanned shopping behavior done by customers. For some consumers, shopping is an activity that can relieve stress and spending money can change the mood for the better. Utami (2018:81) states impulsive purchases occur when consumers feel a strong and sudden desire to buy a product or service. Another opinion says that impulse buying occurs when consumers experience an impulse to buy a product or service without considering why they buy the product or service (Bulan, 2019). Impulse buying is defined as unplanned purchases, which are characterized by rapid decision making. Decisions that occur suddenly and immediately are due to emotional factors shortly after consumers receive input in the form of products or promotional messages (Pancaningrum, 2017). Utami (2018:81) states that there are several types of impulse buying, namely pure impulse, reminder impulse, suggestion impulse, and planned impulse.

Based on the theories presented above, it can be concluded that impulse buying occurs based on the strong momentary emotions to make unplanned purchases in advance. It can be used as a reference or consideration for minimarket owners that pleasing the consumers is important. To please and persuade them doing impulse buying requires a right strategy.

Daulay et al (2021) expresses that the factors that make customers buy impulsively are low-price products, small needs, short-term products, small sizes, and easy-to-reach store locations. Marketing includes distribution in large quantities, self-service outlets, attractive and continuous advertising in mass media, as well as prominent display positions and locations. Consumer characteristics include personality, gender, demographic circumstances, and economic circumstances.

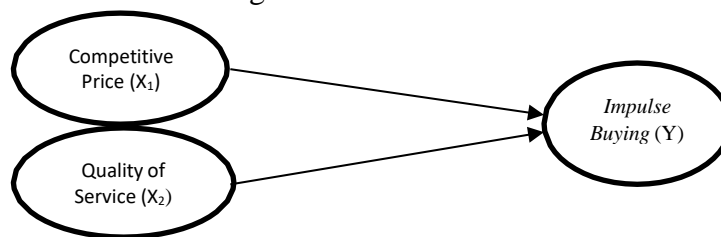
Hidayat (2016) states that impulse buying indicators are spontaneity, strength, compulsiveness, intensity, excitement and stimulus, indifference to consequences, and advertising influence. Spontaneity means that this purchase is unplanned and often occurs due to the consumer's response to the visual appearance of the shopping place. Strength, compulsiveness, and intensity signal an impulse to put aside something else and act immediately to get a product that attracts the consumer's attention. Excitement and stimulus are a sudden urge to buy something which is accompanied by strong emotions to obtain a product. Indifference to consequences is an insistence that arises in consumers to buy a product that becomes very difficult to resist so that the negative consequences that may occur after impulse buying are forgotten or ignored. Being affected by advertisements, customers see the advertised products intentionally or unintentionally and are interested in buying them.

Methods

Research Model

This study aims to theoretically explain the relationship between the influence of competitive prices (X1) and service quality (X2) on impulse buying (Y) at Pontianak Idol Minimarket. The theoretical framework that has been prepared by the author is expected to be able to explain in detail and provide a clear flow regarding the analysis of the influence of competitive prices and service quality on impulse buying at Pontianak Idol Minimarket. Briefly, it is described in the following scheme:

Figure 1. **Research Model**



Good mood consumers tend to do impulse buying. In addition to their mood, competitive prices can also be a trigger for consumers to do impulse buying. A reasonable or lower price will be a consideration for consumers in shopping. Alfani (2020) states that competitive prices have a positive effect on impulse buying. Utami and Rastini (2015) explain that service quality affects impulse buying.

Based on the previous researches, the author makes the following hypothesis:

H₁: Competitive prices have a positive and significant effect on impulse buying.

H₂: Service quality has a positive and significant effect on impulse buying.

Research Methods

This research is in the form of causality, that is a study that looks at the relationship between the researched variables: cause and effect, so that there are independent variables and dependent variables. The population in this study is all customers of Pontianak Idol Minimarket whose number is unknown. The sampling technique used the accidental sampling technique, which was random sampling of consumers who happened to come there. The author used the multivariate method as a method of determining the number of samples and determined 120 samples in this study. To analyze the data collected by distributing questionnaire, the author used the Statistical Package for Social Sciences (SPSS) software version 26. The stages of data analysis are: validity and reliability test, classical assumption test, correlation coefficient analysis, coefficient of determination test (R²), multiple linear regression test, F test, and T test.

Findings

The purpose of this study is to find out whether competitive prices and service quality affect impulse buying. Based on the data from the questionnaires filled out by the respondents, the author can analyze the results of their responses to the indicators of each variable. To find out the consumer's answer to the statements listed in the questionnaire, the author presents it in a table as follows:

Table 1. Respondents' Answer Analysis Results

Indicator	Answer Weight	Answer Index	Average
Competitive Price (X_1)			
1. Price according to product quality	959	95.5	92.05
2. Price according to market price	912	91.20	
3. Price level	920	92.00	
4. Price lower than competitors	891	89.10	
Conclusion: The respondents averagely gave a high perception of competitive price variables			
Quality of Service (X_2)			
1. Reliability	955	95.5	92.88
2. Responsiveness	926	92.6	
3. Guarantee	911	91.1	
4. Empathy	919	91.9	
5. Physical Evidence	943	94.3	
Conclusion: The respondents averagely gave a high perception of the quality service variable			
Impulse Buying			
1. Spontaneity	916	91.60	89.78
2. Strength, Compulsiveness, and Intensity	905	90.50	
3. Excitement and Stimuli	905	90.50	
4. Indifference to the Consequences	868	86.80	
5. Affected Ads	895	89.50	
Conclusion: The respondents averagely gave a high perception of the impulse buying variable			

Source: Processed Data, 2022

Table 1 shows that the respondents averagely have a high perception of the variables of competitive prices, service quality, and impulse buying. It means that customers of Pontianak Idol Minimarket agree that the prices offered by the minimarket are competitive and the quality of service is also good. On the variable of impulse buying, respondents argue that customers tend to do impulse buying. Based on the table above, the research findings on the competitive price variables reveal that the most visible indication of competitive prices is the pricing that corresponds to product quality. Instead of getting a lower price at other convenience outlets, customers prefer to get a price that matches the quality so that the sacrifices that customers spend are proportional to the quality and benefits they get. Pricing that matches the quality of the product makes customers think that they are not spending money for nothing but spending money by getting an expected quality. It will certainly be an impetus for customers to build a perception that Pontianak Idol Minimarket provides competitive prices for their products so that customers consciously, or not, become loyal and the possibility of impulse buying is high.

The result on the variable of service quality is that customers assume that the quality of service of a minimarket is said to be good if the services provided are in accordance with what has been promised and the information provided can be trusted and accurate. In addition to being served in a friendly manner, customers also expect a service which is in accordance with what is promised by the minimarket and get precise and accurate information when they are getting obstacles in the transaction process. Meanwhile, the findings on the impulse buying variable prove that customers of Pontianak Idol Minimarket often make unplanned purchases or impulse buying. Customers who often do impulse buying are due to receiving stimuli from the minimarkets, both in the form of competitive prices, good service quality, visual appeal of the product itself, and purchasing power possessed by customers.

The data collected through the distribution of questionnaires was then processed using the SPSS version 26 to make it easier to calculate quantitative research data and to find out how much the variable competitive prices and service quality affect impulse buying at Pontianak Idol Minimarket. The author used validity and reliability tests, classical tests, correlation tests, multiple correlation coefficient (R²) tests, multiple linear regression tests, and hypothesis tests such F tests and T tests to analyze the data.

Table 2. Statistical Test Results

Statistical Test	Test Results		
Validity Test	X _{1.1} = 0.074 X _{1.2} = 0.721 X _{1.3} = 0.746 X _{1.4} = 0.666	X _{2.1} = 0.543 X _{2.2} = 0.651 X _{2.3} = 0.759 X _{2.4} = 0.572 X _{2.5} = 0.572	Y ₁ = 0.670 Y ₂ = 0.724 Y ₃ = 0.682 Y ₄ = 0.739 Y ₅ = 0.620
Information: The validity test supervisor must be >0.5 to get a valid research data			
Reliability Test	X _{1.1} = 0.820 X _{1.2} = 0.818 X _{1.3} = 0.812 X _{1.4} = 0.820	X _{2.1} = 0.827 X _{2.2} = 0.820 X _{2.3} = 0.817 X _{2.4} = 0.819 X _{2.5} = 0.818	Y ₁ = 0.815 Y ₂ = 0.816 Y ₃ = 0.813 Y ₄ = 0.818 Y ₅ = 0.829
Information: <i>Cronbach's alpha</i> must be >0.60 to get a reliable research data			
Normality Test	0.200		
Information: The value of the One-Sample Kolmogorov-Smirnov Test must be >0.05 to get a normal distributed research data			
Multicollinearity Test	Tolerance value VIF	X ₁ , X ₂ X ₁ , X ₂	0.677; 0.677 1.477; 1.477
Information: The VIF value must be <10 to get a non-multicollinearity symptom in the research data			
Heteroscedasticity Test	X ₁ = 0.619 X ₂ = 0.316		
Information: The value of heteroscedasticity >0.05, to get a non-heteroscedasticity symptom in the research data			
Autocorrelation Test	Du < DW < 4 - DU 1.7361 < 1.765 < 2.2639		
Information: Du < DW < 4 - DU value, no autocorrelation in research data			
Correlation Test	X ₁ = 0.494 X ₂ = 0.497		
Information: Has a strong correlation between the two independent variables and the dependent variables			
Multiple Coefficient Test (R ²)	0.313 (31.3%)		
Information: Competitive price variable and service quality has an effect of 31.3%			
Multiple Linear Regression Test	X ₁ = 0.408 X ₂ = 0.354		
Information: The linear regression equivalent is Y = 11.260 + 0.408X ₁ + 0.354X ₂			
Test F	F _{count} Significance level	= 26.667 = 0.000	
Information: Sig value is 0.000, so the competitive price and service quality affect the <i>impulse buying</i> significantly			

Statistical Test	Test Results
T Test	$X_1 = 3.3367$ $X_2 = 3.418$ Sig. = 0.001 sig. = 0.001
Information: Competitive price positively and significantly effects on <i>impulse buying</i>	

Source: Processed Data from SPSS Version 26

Table 2 shows that in the validity and reliability test, all the data used in this study are valid and reliable. In the classical test, no problems are found so that the data is distributed normally and in accordance with the test instructions.

Based on the research that has been carried out, the following results are obtained. Hypothesis one: competitive prices have a positive and significant effect on impulse buying. When the owner of Pontianak Idol Minimarket applies competitive prices, customers will be provoked to make purchases so that sales volume increases. The more competitive the price given by the seller; the more provoked customers are to do impulse buying. Based on the findings of research that has been previously presented, customers assume that competitive prices do not necessarily refer to lower prices than other competitors, but prices that are in accordance with product quality. This is in accordance with the competitive price theory stated by Pelealu (2015) saying that competitive prices are not always about low pricing. Low price with poor quality can also make business bad in the eyes of customers. Customers agree that competitive pricing is a price that matches the quality of the product where a strategical pricing makes customers feel that the sacrifice they spend is in accordance with the quality and benefits they get. Therefore, Idol Minimarket should maintain a pricing strategy in accordance with product quality in order to build a positive perception of customers regarding their competitive prices so that customers are interested in impulse buying.

The results of this study are in line with the research that was conducted by Dauly, Handayani, and Ningsih in 2020. It states that prices affect impulse buying in consumers of a department store in Medan. It shows that the more competitive the price offered by the seller, the more customers will be provoked to do impulse buying. Another study was conducted by Hutami and Rizka (2018) at Jolie Store in Wirobrajan. It reveals that price has a significant effect on impulse buying. The results of this study are also supported by the research carried out by Hanifah in 2021 on Shopee users in Bandung which states that prices have a significant effect on impulse buying.

Hypothesis two: service quality has a positive and significant effect on impulse buying. If Pontianak Idol Minimarket provides good and maximum service, customers are increasingly provoked to do impulse buying. By providing good service, customers will feel comfortable when they are in there and are interested in making purchases so that sales volume can increase. The researches discussed earlier state that the service quality can be said to be good if the owner and employees of Pontianak Idol Minimarket provide accurate information and have sufficient knowledge about the products sold. If customers experience any problems during the transaction processes, they will get clear information.

The results of this study are in line with the research conducted by Hidayat (2016) which states that service quality has a positive effect on impulse buying. It explains that the better the quality of service provided by the seller, the more likely it is for customers to make impulse buying. This research is also supported by the research conducted by Mali in 2021 at PT. Matahari Department Store, Grand Mall Bekasi which states that the quality of service has a positive and significant effect on impulse buying. It is also supported by the research conducted by Ningsih and Kardiyem in 2020 which states that service quality has a positive and significant effect on impulse buying.

Conclusion

Based on the discussion of the research results above, the following results are obtained: there is a positive and significant influence between competitive prices and service quality on impulse buying at the Idol Pontianak Minimarket. The author suggests that Pontianak Idol Minimarket continues to maintain its pricing strategy in order to continue to provide competitive prices. In addition, they can create a suggestion box or a special website to accommodate consumers' suggestions or complaints in order to detect errors and lack of service and correct them so that they can provide even better services in the future. To the next researcher, the author suggests to use other variables that affect impulse buying because in this study competitive prices and service quality have an effect of only 31.3%, while the other 68.7% is influenced by other variables that is not studied yet.

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The Effects of Product Quality, Brand Trust, and Competitive Prices for Prayer Candles Purchase Decisions at PD Cipta Karya Nyata in Punggur Kecil

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Abstract: The development of industry and the competition affect changes in consumer behavior in making purchase decisions so the right strategy is needed for companies to meet consumer needs and demands. This study aims to examine the factors affecting the decrease in sales performance. The factors are product quality, brand trust, and competitive price variables. This study uses a linear regression analysis method which is processed and analyzed using the Statistical Product and Service Solution (SPSS) program version 23. The population in this study is all PD Cipta Karya Real consumers who have purchased prayer candles and are domiciled in Pontianak and its surroundings. The number of samples used was 101 respondents taken by purposive sampling. The findings reveal that purchase decisions are highly influenced by the product quality and competitive costs. Meanwhile, brand trust is found to have little impact on consumers' purchase decisions.

Keywords: Product Quality, Brand Trust, Competitive Price, Purchase Decisions

Introduction

Based on the publication of population census data in 2010 by the Central Statistics Agency, West Kalimantan is one of the provinces in Indonesia with the greatest Chinese population. In the 2010 population census, the number of Chinese citizens in West Kalimantan reached 358,451 people, or 8.15 percent of the total population in West Kalimantan. Due to the large Chinese population, prayer candle companies have some very promising business opportunities. PD Cipta Karya Nyata is one organization that is aware of this chance. These opportunities lead to the rise of rivals that sell similar items.

Consumer considerations in purchase decisions are becoming more evaluative as the sector develops. Consumers pick and purchase things for a variety of reasons, all of which must be taken into account. A suitable and successful marketing plan is required in order to establish a competitive edge and win over customers. According to the study of consumer preferences, a number of elements, such as the product, brand, and price, have an impact on customers' purchase decisions (Schiffman & Kanuk, 2008: 8). Maintaining and enhancing product quality is one approach that might enhance consumer choice. Product quality is a feature that demonstrates a product's capacity to meet customer demands or wants. The higher the product quality, the more satisfied customers will be. The consumer satisfaction will trigger an increase in purchase decisions (Kotler, Armstrong, & Opresnik, 2018: 249; Khoironi, Syah, & Dongoran, 2018: 51-52; Badarou, 2021: 9).

Companies may influence customer purchase decisions in addition to product quality by boosting brand trust. One factor that may be used to evaluate a brand's performance is brand trust. It is the capacity of the brand to be dependable (brand reliability) and it prioritizes the interests of the consumer (brand intention). Usually, there is an assumption that trust in a brand would lead to a proposed base. Consumers will remember and develop trust in a brand when their expectations are satisfied and they have a great experience using the product. Customers may be motivated to

buy due to that trust (Delgado-Ballester, 2004: 574, Ferrinadewi, 2008: 147-151; Chaudhuri & Holbrook, 2001: 82; Ha & Perks, 2005: 443).

Competitive pricing is another strategy that might affect customer purchase decisions. Competitive pricing is a strategic price points that take advantage of market competition and are determined by the advantages that consumers receive from a service or product. If consumers feel that the prices offered by the company are more affordable and provide value equal to or even greater than those offered by competitors, consumers will prefer the products offered by the company (Putri & Ferdinand, 2016: 6-7; Novansa & Ali, 2017: 630); Reven & Ferdinand, 2017: 4).

It was observed that there was an issue with the sales performance of prayer candle items at PD Cipta Karya Nyata, which varied and kept decreasing, based on the sales data gathered by PD Cipta Karya Nyata. Because of this, the author is interested in examining a number of variables, including those relating to product quality, brand trust, and competitive price, which are thought to have an impact on these issues.

Literature Review

Product Quality

The capability of a product to meet the demands or desires of customers is referred to as a product's quality. In other words, client satisfaction and product quality are directly correlated. When a product performs its tasks consistently and has the capacity to meet or even exceed customer expectations, it is considered to be of high quality (Kotler, Armstrong, & Opresnik, 2018: 249; Khoironi, Syah, & Dongoran, 2018: 51-52; Trentin, Perin, & Forza, 2012: 851; Badarou, 2021: 9). Customers are satisfied when things are of high quality since they are more useful and valuable to them. Customers will be satisfied, which may encourage them to make purchases, if the business is able to offer high-quality goods that live up to those expectations. In other words, businesses would boost profitability by creating high-quality items (Charantimath, 2017: 7; Hoe & Mansori, 2018: 22; Razak, Nirwanto, & Triatmanto, 2016: 61; Hanaysha, Abdullah & Ghani, 2016: 393).

Quality raw materials, tempting product look, and the rarity of product flaws are a few variables that will be utilized to evaluate various aspects of product quality in this study. Good and high-quality raw materials are used in the production of quality items. Various raw materials will result in various product quality. High-quality items will also be produced if good raw materials are used in the manufacturing process. The degree of consumer satisfaction increases with product quality. Purchase decisions will become higher if consumers are satisfied. A product's design or look that is regarded as appealing and able to draw customers is referred to as having an attractive product appearance. The coloring of a prayer candle can be used to identify and evaluate its appearance. Consumers may also be encouraged to make purchases when they see products with a pleasing design. When a product is not readily harmed while being utilized, product faults are infrequent. The product's quality is determined by how frequently it malfunctions or has flaws, with a smaller proportion indicating higher quality (Mukti, 2015: 98; Ridwan & Desi, 2021: 249; Pratama, Abiyoga W, & Sunny, 2021:656; Tatangin, Ogi & Loindong, 2017: 815; Sebastianelli & Tamimi, 2002: 444).

Brand Trust

Brand trust is the ability of a brand to be reliable (brand reliability based on the consumer faith that a product can satisfy demands, fulfill promises of value, and prioritize the interests of customers (brand intention). The consumer's perceived relationship with the brand is essential to build consumer trust. If a brand can meet and satisfy the demands of customers, it can be

trusted. When a product is purchased and customer expectations are satisfied, the experience will result in preferences and trust. A reliable brand will influence customers to choose it over competing brands when making purchases. This is because by buying a trusted brand, consumers can save time and costs, as well as reduce purchase risk (Delgado-Ballester, 2004: 574, Ferrinadewi, 2008: 147-150; Ha & Perks, 2005: 443; Setyawan, Kussudiyarsana, & Imronudin, 2015: 40).

Brand satisfaction, brand liking, and brand reputation will be employed as indicators of the brand trust variable in this study. Consumers' happiness with a brand is known as brand satisfaction. Consumer satisfaction may be attained if a brand is able to meet the wants and requirements of customers as well as deliver on the promise made by brand liking, or the capacity of a brand to create circumstances in which customers would find it appealing. Customers will believe and tend to choose to buy a brand above other brands if they are content with it and enjoy it. The consumer's perception of a brand's reputation is how well-regarded they find it to be (Noor, 2014: 130; Puspita, Yunus, & Sulaiman, 2017: 48; Tjahyadi, 2006: 73 & 75; Setyawan, Kussudiyarsana, & Imronudin, 2015: 39 -40).

Competitive Price

Competitive price is strategic price points to get the most out of a good or service based on market competition, where customers believe that the cost is in accordance with the benefits that they receive (Investopedia Team, 2020; Putri & Ferdinand, 2016: 7). If a company's pricing is regarded as more reasonable than that of its rivals and is thought to be proportionate with the benefits or value received by customers, the price is said to be competitive. Comparing the prices that the company is offering to those of rivals is the first consideration in a competitive pricing strategy for the business. Customers will favor the items supplied by the business if they believe that the prices are more reasonable and offer an equivalent or even better value than those charged by rivals. Moreover, it is crucial for the business to understand the strength and pricing strategies used by rivals. It seeks to help businesses plan and implement proper competitive prices that will compete favorably and draw in customers (Novansa & Ali, 2017: 630; Putri & Ferdinand, 2016: 6; Amron, 2018: 236; Reven & Ferdinand, 2016: 6; Amron, 2018: 236; Reven & Ferdinand, 2017: 4).

Price in line with the quality, affordable price, and price in line with expectations are some of the indicators that will be utilized to evaluate the competitive price variable. Price in line with the quality refers to the price charged compatibly to the goods being offered. Customers will evaluate if the product's quality and pricing are compatible before making a purchase. Customers are more likely to select and purchase a product if they believe that the price being charged is reasonable given the quality of the goods they will be receiving. When the cost is less than that of rivals, it is considered to be an affordable price. Products with more reasonable and lucrative prices will entice customers to purchase them (Reven & Ferdinand, 2017: 6; Putri & Ferdinand, 2016: 7 & 11; Sandra, Rachman, & Suharyanto, 2021: 83; Nurcahyo, 2018: 22; Indrasari, 2019: 42).

Purchase Decisions

Consumers make decisions about which goods or brands to buy and consume through the process of purchase decisions. Before making a purchase decision, customers will go through a number of phases and procedures; the first of which is need recognition. When customers are at the recognition stage, they are aware of the issue and their wants. Consumers are compelled to look for more information about the product they will choose during the information research or information search stage. Consumers analyze potential alternatives based on what they believe will be more advantageous. This is known as the evaluation of alternatives stage. The next stage is the purchase decision, which is when consumers have decided which alternative to choose to buy which is considered the most trusted and profitable. The last stage is the post-purchase decision or post-purchase behavior, which is where consumers take further action after the

purchase decision process, which is based on whether or not consumers are satisfied with the selected product (Kotler, Armstrong, & Opresnik, 2018: 177; Hidayat et al., 2020: 45; Qazzafi, 2019: 131).

The marketing mix, which is a collection of components and strategies intended to reach, engage, and persuade customers to buy the company's products, is one of three variables that, according to the study of consumer behavior, might impact consumer purchase decisions. Offer. The impact of the nearest relatives and friends, as well as socioeconomic class, peer groups, culture, and subculture, are socio-cultural influences. The source of communication is the mechanisms that businesses employ to tell customers about their products (Schiffman & Wisenblit, 2019: 345).

The indicators used to measure variables on the purchase decisions in this study are purchasing stability, purchasing without consideration, and daring to take the risk of purchase. Purchasing stability is where consumers decide to buy the product steadily and without hesitation. Buying without consideration is where consumers directly buy products without going through a process of consideration and evaluation first. Daring to take risk of purchase is where the consumers understand and dare to accept all the risks that occur when buying and using the product (Reven & Ferdinand, 2017: 6; Putri & Ferdinand, 2016: 7; Ningrum, 2018: 51).

Research Methods

This study is an example of causal explanatory research, which seeks to identify the causes of a phenomena and determine the causes and effects of the variables under investigation. This study will explore how factors including product quality, brand recognition, and affordable prices affect consumers' decisions to buy. In this study, questionnaires and interviews were employed as the primary data collection tools. All PD Cipta Karya Nyata users who had previously purchased sembanyang candle products made up the population in this study, and a total sample of 101 respondents was collected via the multivariate technique. Purposive sampling is the sampling method employed, whereas validity tests, reliability tests, and conventional assumption tests are used as data analysis methods. This study also used a measurement scale in the form of a rating scale in order to quantify the data and make it easier to test, then the data were analyzed by linear regression analysis.

Discussion

To find out respondents' responses, the author analyzed the variables by determining the value of the answer interval from 1 to 10. The criteria for the index range of respondents' answers are determined using three levels, namely the number of respondents' indexes that are in the range of 10.00 to 40.00 is said to fall into the "Disagree" category, the number of index respondents that are in the range of 40.01 to 70.00 is categorized as "Neutral", while the number of index respondents that are in the range of 70.01 to 100.00 can be categorized as " Agree" to the statement of the questionnaire. The following are the results of the analysis of respondents' answers in this study:

Table 1. Results of Respondents' Answer Analysis

Indicator	Answer Weight	Answer Index (%)	Average
<i>Product Quality (X₁)</i>			
1. High-quality raw materials	822	82.2	82.60
2. Attractive appearance of the product	821	82.1	
3. Defects rarely occur	835	83.5	
Conclusion: On average, respondents give a high perception of product quality variables			
<i>Brand Trust (X₂)</i>			
1. Brand satisfaction	829	82.9	82.15
2. Brand liking	820	82.0	
3. Brand reputation (1)	812	81.2	
4. Brand reputation (2)	825	82.5	
Conclusion: On average, respondents give a high perception of the brand trust variable			
<i>Competitive Price (X₃)</i>			
1. Price in line with the quality	831	83.1	83.30
2. Affordable price	838	83.8	
3. Price in line with expectations	830	83.0	
Conclusion: On average, respondents give a high perception of the competitive price variable			
<i>Purchase Decisions (Y)</i>			
1. Purchasing stability (1)	855	85.5	84.43
2. Purchasing without consideration	837	83.7	
3. Daring to take the risk of purchase	818	81.8	
4. Purchasing stability (2)	867	86.7	
Conclusion: On average, respondents give a high perception of the purchasing decision variable			

Source: Processed Data, 2022

Based on the results of the analysis of respondents' answers, it can be seen that the variables of product quality, brand trust, competitive prices, and purchase decisions individually produce an average index value of respondents' answers of 82.60 percent, 82.15 percent, 83.30 percent, and 84.43 percent. This indicates that most respondents give a high perception of the variables of product quality, brand trust, competitive prices, and purchase decisions. Based on those results, the product quality variable is found if most of the respondents explain that the product has used quality raw materials so that the product has good durability and has varied quality options. According to the majority of respondents, the product has good durability and is rarely damaged or broken. In addition, research respondents said that the product already had a good appearance, but a small number of respondents said that the product design was considered not to have uniqueness and was just like a prayer candle in general. For this reason, companies can seek to take corrective actions and innovate so that the products produced are more attractive and unique.

In the variable of brand trust, most respondents said that they were satisfied when using the Cipta Karya Nyata brand of prayer candles. The satisfaction is related to the suitability of the quality, price, and service received by the respondents. Then, most of the respondents said that the Cipta Karya Nyata brand was a well-known and trustworthy brand. However, it was found that there

were several respondents who said that Cipta Karya Nyata was not always the respondent's main choice. Thus, one of the efforts that the company could take is to increase customer value in order to be superior to competitors.

In the variable of competitive price, according to the responses of most of the respondents, the price of the product set is feasible and comparable to the quality of the product. The respondents averagely also stated that the price offered by the company tended to be cheaper than the price offered by competitors. However, it was also found that there was a small number of respondents who said that the price of the product was not in line with the respondent's expectations because the respondents wanted the company to conduct promotions more regularly. Therefore, companies can consider improving their promotional strategies to make them more attractive to consumers.

In the variable of purchase decisions, most of the respondents stated that they did not hesitate buying a product because the product was already known and had a good reputation. Then it was found that the respondents bought the product confidently and without consideration because they believed in the company. Most of the respondents also claimed to have understood the risks that might occur when making a purchase. Apart from that, the majority of respondents said they are willing to make repeat purchases in the future.

To find out how significant the influence of the variables of product quality, brand trust, and competitive price have on purchase decisions, the author conducted statistical tests and data regression analysis using the Statistical Product and Service Solution (SPSS) software version 23. The results of the data processing are presented in table of statistical test results shown in Table 2 below:

Table 2. Statistical Test Results

Validity Test															
X _{1.1}	=	0.696	X _{2.1}	=	0.573	X _{3.1}	=	0.613	Y _{1.1}	=	0.736				
X _{1.2}	=	0.657	X _{2.2}	=	0.446	X _{3.2}	=	0.606	Y _{1.2}	=	0.611				
X _{1.3}	=	0.613	X _{2.3}	=	0.601	X _{3.3}	=	0.636	Y _{1.3}	=	0.275				
			X _{2.4}	=	0.633				Y _{1.4}	=	0.479				
Reliability Test															
X _{1.1}	=	0.884	X _{2.1}	=	0.889	X _{3.1}	=	0.888	Y _{1.1}	=	0.883				
X _{1.2}	=	0.886	X _{2.2}	=	0.895	X _{3.2}	=	0.888	Y _{1.2}	=	0.888				
X _{1.3}	=	0.888	X _{2.3}	=	0.888	X _{3.3}	=	0.887	Y _{1.3}	=	0.902				
			X _{2.4}	=	0.887				Y _{1.4}	=	0.893				
Normality test															
<i>Kolmogorov-Smirnov Test</i>										0.200					
Heteroscedasticity Test															
X ₁	=	0.123	X ₂	=	0.508	X ₃	=	0.803							
Multicollinearity Test															
<i>Tolerance Value</i>						X ₁ ; X ₂ ; X ₃	0.409 ; 0.469 ; 0.403								
VIF						X ₁ ; X ₂ ; X ₃	2.443 ; 2.130 ; 2.481								
Autocorrelation Test							DU < DW < (4-DU)		1.7374 < 1.852 < 2.263						
Correlation Test							X ₁	=	0.000	X ₂	=	0.000	X ₃	=	0.000
Coefficient of Determination Test (R²)							RSquare		0.562 (56.20%)						
Multiple Linear Regression Test															
X ₁	=	0.455	X ₂	=	0.143	X ₃	=	0.255							

F Test						
	Fcount		43.823			
	Significance level		0.000			
t Test						
	X ₁	=	4.412	X ₂	=	1.655
	X ₃	=	2.118			
	Sig	=	0.000	Sig	=	0.101
				Sig	=	0.037

Source: Processed Data from SPSS, 2022

Based on Table 2, It can be seen that the overall result of r_{count} is greater than r_{table} at 0.1956 so it can be said that the questionnaire for the variables of product quality, brand trust, competitive prices, and purchase decisions is valid and can be used for further testing. It can also be seen that *Cronbach's Alpha* for the variables of product quality, brand trust, competitive price, and purchase decisions yield a value greater than 60 percent or 0.60. Hence, it can be concluded that all statements contained in the independent and dependent variables are reliable.

From the results of the normality test using the *Kolmogorov-Smirnov* Test method, the value of the *Asymp. Sig.(2-tailed)* produces an output of 0.200 which is higher than the significance value of 0,05, so the research data is said to be normally distributed. The results of the heteroscedasticity test using the Glejser test method show that the value of the significance output for the three independent variables is greater than the 0.05 significance requirement so that the data is concluded to be free from heteroscedasticity symptoms. On the results of the multicollinearity test, the tolerance value for all independent variables is greater than 0.1 and the VIF value is less than 10. So, it can be concluded that the research data does not indicate any symptoms of multicollinearity and there is no correlation between the independent variables. In the autocorrelation test results, the Durbin-Watson value is 1.852 with 5 percent or 0.05 so the DU value is 1.7374. From these figures, it can be seen that the value of $DU < DW < (4-DU)$, namely $1.7374 < 1.852 < 2.2626$. Thus, it can be concluded that there is no autocorrelation symptom in the regression model.

From the results of the correlation test, the significance value for all independent variables is 0.000 which means that the three independent variables have a strong and significant correlation to the dependent variable because they meet the criteria for the sig value of less than 0.05. Based on the results of testing the coefficient of determination or *R square*, the *Adjusted R Square* value is 0.562 or 56.2 percent. This indicates that product quality, brand trust, and competitive prices affect purchase decisions by 56.2 percent, while the remaining 43.8 percent is influenced by other factors not tested in this study. The results of the F test produce a significance value of 0.000 where the value is smaller than the value of α 0.05. In the F test, the value of F_{count} is 43.823 and the value of F_{table} is 2.698 so the value of F_{count} is greater than the value of F_{table} . Thus, it can be concluded that product quality, brand trust, and competitive prices influence the purchase decisions at PD Cipta Karya Nyata in Punggur Kecil simultaneously.

The t test results show that the value of t_{count} for the variable of product quality (X_1) is 4.412 greater than the value of t_{table} at 1.6607 and the significance value is more than 0.05 so it can be said that the product quality has a positive and significant effect on purchase decisions and H_1 is accepted. The results of this study are in line with previous research conducted by Sari & Endang in 2021 which stated that product quality had a positive and partially significant effect on purchase decisions. This result is also in accordance with research conducted by Pratama, Abiyoga W, & Sunny in 2021 which found that product quality influenced purchase decisions. So, it can be interpreted that the higher the product quality, the higher the consumer purchase decisions (Kotler, Armstrong, & Opresnik, 2018: 249; Badarou, 2021: 9).

The results of the t-test on the brand trust variable (X_2) reveal that the value of t_{count} at 1.655 is smaller than the value of t_{table} at 1.6607 and the significance value is less than 0.05. So, the variable does not meet the test criteria. This indicates that the brand trust variable has no significant effect on purchase decisions and H_2 is rejected. The results of this study are slightly different from the results of previous studies conducted by Putra, Kawiana, & Suartina in 2021 and Mardhotilla in 2019. In these previous studies, it was found that brand trust had an effect on purchase decisions. The differences in the findings from previous studies prove that differences in the products and areas can produce different findings. Another factor that is thought to cause brand trust to have no effect on purchase decisions is because consumers tend not to pay too much attention to brands when buying products related to religion, tradition, or culture. Consumers only buy products in terms of quality, price, and functionality without paying attention to the product brand. Therefore, the trust in the brand is not too crucial for consumers to be able to make their decision to buy the product.

Based on the results of the t-test, the value of t_{count} for the competitive price variable (X_3) is 2.118, which is greater than the value of t_{table} at 1.6607 and the significance value is more than 0.05. It can be said that the competitive price variable has a positive and significant effect on purchase decisions and H_3 is accepted. The results of this study are in line with a previous study by Putri & Ferdinand in 2016 and a previous study by Agatha in 2018 which explained that price had an effect on purchase decisions. Product prices that are superior and competitive compared to competitors accompanied by the same product value will increase consumer interest in purchase decisions. This is because consumers feel that the product is more profitable than competing products (Novansa & Ali, 2017: 630; Putri & Ferdinand, 2016: 6; Amron, 2018: 236).

Conclusion

Based on the findings of this study conducted on the effects of product quality, brand trust, and competitive prices on purchase decisions for prayer candles at PD Cipta Karya Nyata in Punggur Kecil, it is revealed that the product quality and the competitive prices affect the purchase decisions, whereas the brand trust has little impact on purchase decisions.

Although the majority of respondents say that the product's appearance is fairly good, a small number of them explain that the design is considered typical and lacked uniqueness. The majority of respondents also state that consumers can trust the brand since it is well-known. The brand is not often the respondent's first pick, according to some respondents, though. Even though some respondents claim that the product's pricing do not satisfy their expectations, the majority of respondents feel that the price is more reasonable and equivalent to the quality of the goods received.

Based on the findings of the research and tests that have been done, the author suggests that the business should innovate and boost creativity to produce more alluring and distinctive items in order to draw in more customers. Additionally, the business can raise customer value to outperform rival products and also promote their own products periodically. It is hoped that future researchers will be able to uncover and look more closely at other factors that are not included in this study but might have an impact on consumer purchase decisions.

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Asset Turnover, Profitability, Capital Structure, and Firm Value in Coal Subsector in Indonesia

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Abstract: This study aims to analyze the effect of asset turnover, profitability, and capital structure on firm value. A total of 21 samples of Indonesian Stock Exchange Coal Subsector Companies from 2016 to 2020 were used in this study and the form of the study is an associative research with OLS regression model. The results reveal that asset turnover has a positive effect, profitability has a negative effect, and capital structure has no effect on firm value. The magnitude of the research model in explaining changes in firm value is 22.60 percent.

Keywords: asset turnover, profit margin, solvability, and firm value.

Introduction

The firm value reflects the prosperity of shareholders whose increase can be guaranteed by the management in managing their finances properly. Management success indicators can be analyzed by various ratios such as capital structure (Simorangkir, 2019; Fajaria & Isnalita, 2018), profitability (Satrio, 2022b; Harahap, Septiani & Endri, 2020; Murniati, 2017), and asset turnover (Andreas et al., 2021; Lumapow & Tumiwa, 2017).

Capital structure reflects the total debt owned by the company to its equity. The higher capital structure shows that the company is dependent on the capital from outside parties or creditors, and the company's burden will also be heavier. This condition can reduce the ratings given by the public.

Profitability is the company's ability to generate net income from sales, while asset turnover is an activity ratio that reflects the effectiveness and efficiency of the company in managing its overall assets to generate sales levels. The net income earned and the efficiency that can be seen in asset turnover increase public confidence in the company.

This study aims to analyze the effect of capital structure, profitability, and asset turnover on firm value. The object of the study is the Coal Subsector Company with the consideration that the activities carried out by the industry provide benefits in the form of increasing foreign exchange while ensuring the availability of energy for the country.

Literature Review

Trade-off Theory

Trade-off theory explains the use of the optimal capital structure for the company (Modigliani & Miller, 1963). In optimizing its capital structure, the company's management needs to maintain the use of debt at a certain level. If management increases the use of debt too high, it can cause a burden for the company so that the implementation of an optimal capital structure will not be achieved. (Putra & Sedana, 2019). This condition explains that if the position of the capital structure is above the target or is already optimal, the increase in debt made by management can reduce the value of the company (Niar, 2019).

The use of debt can increase the firm value, but only to a certain point. If the use of debt exceeds this point, the value of the company can decrease. Although the trade-off theory model cannot determine the optimal capital structure precisely, this model has made an important contribution that companies that pay high taxes can use more debt than companies that pay low taxes (Kontesa, 2015).

The essence of the trade-off theory is to balance the benefits and risks that arise as a result of using debt (Putra & Sedana, 2019). If the used debt still provides benefits to the company, the use of debt can be increased again. On the other hand, if the use of debt poses a greater risk than the benefits to the company, the increase in debt must be stopped.

Company Values

The main goal of the company is to maximize the prosperity of shareholders through firm value (Fajaria & Isnalita, 2018). This value is very essential because in addition to being able to increase the wealth of shareholders (Mikial et al., 2020), the firm value can provide information regarding the company's performance and prospects in the future.

Firm value can be analyzed through Tobin's Q ratio (Satrio, 2022b; Sucuahi & Cambarihan, 2016). This ratio can be measured based on the market value of equity and total debt, which is then compared to total assets (Setiyawati, Wahyudi & Mawardi, 2017). If this ratio is higher or more than one, the stock price is being overvalued so that the value of the company increases, which can increase the prosperity of shareholders and vice versa.

Capital structure

Capital structure measures how much a company uses funds from debt (Harjito & Martono, 2014). This ratio can reveal the total debt used by the company in carrying out its operational activities and to finance its assets. The use of debt has risks, so the management must be careful in managing debt and equity sources to minimize the risk (Kasmir, 2018). Excessive use of debt compared to equity will cause high interest which can become a burden for the company.

One way to measure capital structure is the debt to equity ratio (DER). This solvency ratio is a comparison between total debt and total equity (Hery, 2019). The higher this ratio means that the company has a high dependence on funds from external parties and has a high risk of bankruptcy and vice versa.

In financial management, the company is faced with the problem of determining the optimal capital structure (*trade-off theory*) (Modigliani & Miller, 1963). The optimal structure of the company's capital can be seen from the large amount of benefits generated from the funding compared to the financial burdens that arise. Companies with higher use of debt are faced with higher financial burdens as well. This condition can cause financial difficulties if it is not balanced with poor performance.

The higher the use of debt, the higher the financial burden, which in turn can lead to negative perceptions from the public. This condition can lead to a decrease in firm value. This argument is strengthened by Simorangkir (2019) and Fajaria & Isnalita (2018) which state that the capital structure (debt to equity ratio) has a negative effect on firm value. Based on this description, the hypothesis used is:

H₁: Debt to equity ratio has a negative effect on firm value.

Profitability Ratio

The management aims to obtain the maximum net profit (Kasmir, 2018). If the profit is higher, this condition can encourage the company to expand as well as be used for reinvestment. Management is categorized as successful in implementing efficiency if it can convert a high level

of profit while generating cash for the company (Janice & Toni, 2020). Companies having a high level of profitability means that this company is very profitable.

Profitability ratio can be used to analyze the management's ability to earn profit from the use of its capital (Harjito & Martono, 2014). Net profit margin (NPM) is one of the profitability ratios used to measure the percentage of net profit on net sales (Hery, 2019). NPM analysis is used to determine the company's ability to gain profit as well as to implement efficiency (Harahap, Septiani & Endri, 2020). The higher this ratio, the higher the net profit obtained by the company. This ratio is useful for companies to re-evaluate the ability of the management to generate profits.

The company's success in utilizing resources efficiently can increase sales. Companies that have high profit margins from sales can reflect good financial performance as well. High NPM can reflect the success of management in suppressing inefficiency so that the net cash flow from the company's operational activities also increases.

The higher the profit, the higher the financial performance, which in turn can give confidence to investors or the public to invest. Hence, it has a positive impact on the value of the company. This argument is reinforced by Satrio (2022b), Harahap, Septiani & Endri (2020), and Murniati (2017) who state that NPM has a positive effect on firm value. Through this argument, the hypothesis can be formulated as follows:

H₂: Net profit margin has a positive effect on firm value.

Asset turnover

The amount of money issued by the company to obtain fixed and current assets needs to be managed effectively and efficiently in order to produce optimal sales and to prevent excessive burdens. The management that regulates all operational activities within the company will be very dependent on the productive assets owned (Lumapow & Tumiwa, 2017). This condition requires the company's management to maintain the quality of asset management in order to maintain optimal company activities.

The level of efficiency over the utilization of resources owned by the company or to assess the company's ability to carry out all its activities can be determined using the reference activity ratio (Hery, 2019). Total asset turnover (TATO) is one of the activity ratios that measures the overall turnover of assets owned by a company in obtaining sales (Harjito & Martono, 2014). The higher this ratio, the higher the sales obtained by the company.

In managing overall assets, companies need to maximize productive assets to increase sales results. A company that has a high sale of total assets can reflect the company's good performance. High TATO shows the success of the management in managing assets effectively and efficiently as well as existing capital so that asset turnover becomes high.

Higher sales can indicate the success of the management in utilizing assets productively, which in turn can give investors confidence in the company to invest in. This condition can increase the firm value. This argument is reinforced by Andreas et al. (2021) and Lumapow & Tumiwa (2017) who state that TATO has a positive effect on company value. Based on this argument, the hypothesis can be derived as follows:

H₃: Total asset turnover has a positive effect on the value of the company.

Methods

This research was conducted at the Coal Subsector Company on the Indonesia Stock Exchange. The secondary data was in the form of annual financial statements of companies with a population of 69 in 2020 and a sample of 21 companies with a determination based on the

purposive sampling method based on the criteria that the company had conducted an initial public offering (IPO) before 2015; was not being subjected to suspension on the Indonesia Stock Exchange; and had non-year-end bookkeeping dates. The test used the OLS regression model and the measurement of the firm value was with Tobin's Q (Satrio, 2022b; Sucuahi & Cambarihan, 2016).

Findings

Based on Table 1, the mean of TATO is 0.665882, which indicates the company's asset turnover rate is still low enough to get sales. There is an inefficiency on the part of the company's management in using capital, and there is also the potential for financial difficulties to be seen in the value of the company's NPM and DER in this subsector. In general, companies in this subsector are still rated well by the public (Tobin's Q 1.387).

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TATO	126	0.0000	2.4769	0.665882	0.5269102
NPM	126	-5395.3771	1397.7707	-53.239242	519.9745060
DER	126	-4.3053	34.0556	1.647679	4.1917951
TOBINS_Q	126	0.3678	4.6282	1.387053	0.7989348
Valid N (listwise)	126				

Source: Processed Data, 2022

In Table 2, the correlation obtained shows a value of 0.497. This condition explains why there is a fairly strong relationship between TATO, NPM, and DER and the firm value. The magnitude of the influence of TATO, NPM, and DER on the firm value is 22.60 percent. An f value of 11.707 explains that the research model is worth analyzing for changes in firm values.

Table 2. Multiple Linear Regression Values

Type	B	T	Sig.	F	Adjusted R Square	R
(constant)	0.501	8.845	0.000			
TATO	0.530	5.584	0.000	11.707	0.226	0.497
NPM	0.000	-3.060	0.003			
DER	0.015	1.630	0.106			

Source: Processed Data, 2022

The acquisition of t DER value of 1.630 means that DER has no effect on the firm value (H_1 is rejected). DER has no effect on the company's value due to the positive and negative roles (Satrio, 2022a) of debt use in the company. Funds from creditors are useful for expansion and financing operational activities while guaranteeing the availability of company assets. This creditor trust can increase investor confidence so that the firm value will rise. In addition to positive benefits, the use of debt is inseparable from negative impacts. The high use of debt by the company will cause a high financial burden, so that it is faced with the potential for financial distress. Based on the trade-off theory, the addition of debt will cause a trade-off with the costs incurred. Based on this, the public will have a negative perception, which can also reduce the firm value.

The NPM test results have a t value of -3.060, which means that NPM negatively affects the company's value (H_2 is rejected). The non-direction of the NPM on the value of the company reflects the company's ability to generate high net profit from sales but is not a leading indicator for the formation of company value. This situation occurs due to the irrational behavior of

investors, who do not always think rationally when investing. Irrational behavior carried out by investors is due to the phenomenon of volatile coal prices (Nafisah & Daryanto, 2020), so that companies in this subsector can experience losses. However, this can be responded positively by investors so that they make an irrational decision by thinking that companies that lose money in the previous period have the opportunity to maximize the increase in coal prices in the next period to benefit the company. Based on this phenomenon, investors will have a positive perspective towards the company when investing, which can increase its value.

The t value for TATO is 5.584, which means that TATO has a positive effect on the company value (H_3 is accepted). The direction of TATO on the firm value reflects the ability of the management to manage its assets to generate high sales, which is positively responded by the public. The high value of TATO indicates the success of the management in managing assets efficiently and effectively to achieve sales, so that high revenue will have a positive impact on the company's financial performance. This situation can strengthen the net cash flow received by the company so that it can be utilized to expand. This condition provides confidence for investors to invest, which has an impact on increasing the firm value.

Conclusion

Based on the discussion above, it is concluded that DER does not affect firm value, NPM has a negative effect on firm value, and TATO has a positive effect on firm value. The limitation of this study is that the scope of the analysis is not in-depth, which means it only analyzes internal factors in the form of company financial data. Based on the existing limitations, subsequent studies can analyze factors with a wider scope. Analysis related to investor behaviour is an interesting topic for future research.

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The Effect of Competitive Price, Brand Image, and Promotional Appeals on Purchase Decisions of United Bike

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Abstract: Marketers use various strategies in business competition to influence consumer purchase decisions. CV Sukses Indah Sepeda as a distributor of United Bike in Pontianak is the object of this research. This research analyzes the effect of competitive price, brand image, and promotional appeals on purchase decisions. Sampling uses a non-probability sampling technique with the accidental sampling method where the respondents were consumers who had bought United Bike at CV Sukses Indah Sepeda. The sample consists of 104 respondents. Hypothesis test uses multiple regression techniques. The results show that competitive price, brand image, and promotional appeals have a positive and significant influence on purchase decisions.

Keyword: Competitive price, brand image, promotional appeals, purchase decisions.

Introduction

Bicycle industry is one of the businesses that has not been adversely affected, but has had a positive impact during the COVID-19 pandemic instead. Bicycles have become the most popular sport equipment and means of transportation for people. The use of public transportation is considered less safe due to fears of contracting the virus so that it has increased the use of bicycles as a means of transportation. Cycling is also one of the most popular hobbies as a substitute for public transportation. Because of these two conditions, bicycle sales have soared in many countries, including Indonesia. The development of the domestic bicycle industry during the pandemic is the most rapid increase in the history of the bicycle industry. The bicycle industry in Indonesia is showing rapid development due to the increasing demand during the COVID-19 pandemic. The awareness that exercise is essential for health is a primary factor in increasing bicycle sales in 2020.

The government eliminates people's dependence on motorcycles with the help of the bicycle industry. They hope that the habit of using bicycles as a means of transportation and a hobby of riding bicycles will continue for a long time so that the bicycle industry can develop to a better stage in the future. United Bike is one of the bicycle companies produced domestically that have exported to foreign countries. As a domestic bicycle company, United provides several categories of bicycles, ranging from city bikes, mountain bikes, folding bikes, tandem bikes, fixed gear bikes (fixie), road bikes, and hybrid bikes. A company can set a suitable competitive price to control the purchase decisions. Determining the right competitive price will help the product look better than competing products so that consumers will make purchase decisions.

Previous research by Kusmadeni and Eriyanti (2021) shows that competitive price influences purchase decisions positively and significantly. On the contrary, Mulyana (2021) notes that price has no significant effect on purchase decisions. Mirabi, Akbariyeh, and Tahmasebifard (2015) show inconsistent results that price has no significant impact on purchase decisions. The product brand image is essential as one of the factors that need to be considered by companies when developing

marketing strategies. Thus, consumers can instill a positive representation and choose their products rather than from the competitors. Promotional appeal is a powerful marketing strategy because it can be the origin of consumers getting to know the product. Companies take advantage of promotions as the communication medium between companies and consumers. Good promotional appeals can help companies attract consumers to see and get to know the product so that consumers are interested in making purchase decisions. The problem in this research is a result of previous studies stating that competitive price has no significant effect on purchase decisions. The research aims to determine the impact of competitive price, brand image, and promotional appeals on purchase decisions. The research method used is descriptive and causal.

Literature Review

Competitive Price

Price is the sum of all stated values in monetary units in the form of currencies, such as Rupiah, Dollar, Yen, and others, that are issued or paid by consumers to get the benefits of owning or using the purchased product or service so that it can meet consumers' needs and desires (Kotler & Armstrong, 2012: 290; Ritonga et al., 2019: 103; Shinta, 2011: 102). Pricing affects consumers' perceptions of products due to the development of business competition. Thus, companies set a competitive price to maintain the existing market share. A competitive price is the pricing by companies based on strategic considerations, prices, costs, and marketing activities offered by competitors. The price must be considered feasible, appropriate, and acceptable by consumers after they spend a value in a sum of money to have a product so that consumers can feel the sacrifices paid by the benefits obtained from the product (Hamdani & Haikal, 2017: 255; Kotler & Armstrong, 2017: 317; Putri & Ferdinand, 2016: 7).

The first indicator of competitive price in this research is the suitability of price with product quality. In terms of product quality, consumers often assume that the higher the price, the more it shows the quality of the product. To produce quality products, companies need to incur costs. Companies need to consider the design to develop a good product, add up the product development cost, and set a price that can cover costs and add to the profit target. The second indicator is the price suitability with the product benefits. In terms of product benefits, consumers will judge whether the price they exchange for the advantage of owning or using the product is worth the price they spend. If the benefits provided fail to meet expectations, consumers will be disappointed. However, If the benefits meet expectations, consumers will be happy. The third indicator is price affordability. An affordable price is a price that consumers are willing and able to pay to get the product in the target market. Companies need to ensure that they can offer affordable prices with high quality without incurring losses. Therefore, the first hypothesis is:

H₁: Competitive Price has a significant effect on the purchase decision.

Brand Image

A brand is an identifier made by one seller or group of sellers consisting of a name, symbol, logo, character, design, or a combination of all these elements which assist consumers in identifying products or services from many products or services so that consumers can differentiate the products or services offered from those of other competitors (Kotler & Keller, 2012: 412; Ritonga et al., 2019: 81-82; Tjiptono, 2014: 98). If the company succeeds in building a brand image, the brand will be recognizable. Brand image is a consumer's view of a brand or brand association in consumers' memories, either after experiencing a direct or indirect experience with a product or service brand. Furthermore, brand identity is recognizable because of the company or other sources, namely the media and consumer partners. (Keller, 2013: 549; Tjiptono, 2011: 100; Goworek & McGoldrick, 2015: 331)

The first brand image indicator is the strength of brand associations. Brand associations come from brand attributes and brand benefits. While brand attributes are descriptive features that characterize a product, brand benefits are the meaning and value that consumers assume of product attributes. Consumers can form brand associations based on consumers assumptions about the brand, the name, logo or identification of the company, distributor channels, marketing activities, direct experience, online searches, commercial or media information, and word-of-mouth. The second indicator is the favorability of brand associations. Brand associations are superior if the brand has relevant attributes and benefits that can satisfy needs and desires so that consumers give an assessment positively to the brand. The third indicator is the uniqueness of brand associations. Brand associations are said to be unique if they can provide differences in attributes or benefits related to performance or not, either explicitly through direct comparisons with competitors or implicitly.

H₂: Brand image has a significant effect on purchase decision

Promotional Appeals

Promotion is a collection of activities or company efforts in offering and notifying the benefits of products or services. Promotion usually targets consumers to persuade or encourage purchasing a product or service (Ritonga et al., 2019: 119; Widyastuti, 2017: 102; Yau et al., 2019: 119; Widyastuti, 2017: 102; Yau et al. al., 2017: 56). Promotions provide information that can influence the consumers in purchasing actions and introducing products or services so that they are memorable for buyers. For a promotion to be successful, the company needs to create an attraction that can influence consumers. Promotional appeals are the attractiveness of a series of activities to attract consumer buying interest to increase the flow of goods and services. (Meiliani & Ferdinand, 2016: 5; Putra & Santika, 2018: 5573; Santika, 2021: 100)

The first indicator of promotion appeals in this research is meaningful. Meaningful promotion appeals must have a fresh impression and deep insight into consumer wants and needs. The second indicator is believable, which is providing testimonial evidence or endorsements. The third indicator is distinctive. Promotional appeals are said to be unique if the promotions offered by the company have characteristics that distinguish their products or services from other competing brands.

H₃: Promotion appeals have a significant effect on purchase decisions.

Purchase Decisions

Purchase decisions are actions taken by consumers through stages that can be the basis of psychological processes that play an essential role in influencing actual purchases. There are five stages of decision making: problem recognition, information search, evaluation of alternatives, purchase decisions, and post purchase behavior. The first stage, problem recognition, occurs when consumers realize or know a need to fulfill. In the second stage, consumers will conduct information searches through internal and external media. In the third stage, namely the evaluation of alternatives, consumers will choose and evaluate brands and products according to their wants and needs. In the fourth stage, the purchase decision occurs after consumers choose products or services. The last stage is post purchase behavior, where consumers explore products consumed previously. Purchase decision indicators in this research are stability in a product, habits in buying products, providing recommendations to others, and making repeat purchases. (Kotler & Keller, 2016:194-195; Putri, 2017: 33; Soewito, 2013: 218).

The first purchase decision indicator in this research is stability in a product. Product stability can be felt by consumers when the positive value given by the product can overcome the perceived negative value. Consumers will make five decisions if they already know the stability of a product, namely determining the brand, dealer, quantity, timing, and payment method. The second indicator is the habit of buying products. The purchasing products routine occurs when consumers usually reduce the number of chosen product brands, evaluate these brands and determine the brand that best meets expectations. Eventually, the brand is always the first choice when consumers want to buy a product. The third indicator is providing recommendations or suggestions to others. Internal parties and external parties give recommendations to consumers. Recommendations will influence the purchase decision greatly if the explanation is convincing and reliable. The fourth indicator is making repeat purchases. Repurchase means that consumers make purchases of the same product brand more than once. Repurchase is a result of performance and expectations. If the product performance does not match expectations, the consumer is disappointed. On the other hand, if performance meets expectations, consumers are happy.

Methods

The population in this research is the United Bike consumers at CV Sukses Indah Sepeda Pontianak, whose exact number is unknown. The sampling technique used the accidental sampling technique. The number of samples in this research was determined based on the multivariate theory, with the number of the respondent is 110 respondents. The form of research in this research uses descriptive methods and causality methods. The descriptive methods explain what is going while the causality method explains the causal relationship when examining a particular sample. Data collection techniques used in this research were questionnaires and interviews. The data from the questionnaire was analyzed using the SPSS program version 23.

Findings

The author of this research distributed questionnaires to 110 respondents, although the final respondents who passed the sample were 104. This research analyzes how much influence the competitive price, brand image, and promotion appeals variables have on the purchase decision of United Bike at CV Sukses Indah Sepeda Pontianak. The results of the questionnaire distribution show that on average, respondents who buy United bicycles are 31-40 years old males. Some of the respondents bought United's MTB bicycles. The author uses the three-box method criteria to get the basic interpretation of index values. Respondents give a high perception of the competitive price variable. The findings show that respondents think that the price offered is acceptable, but

there are not many choices of bicycle types. In addition, although the price is worth the helpful features, the operation is complicated. Besides that, each bike has only 3 to 4 choices. The respondents typically feel that the price is worth the quality of the sturdy bicycle frame, the color of the paint and unfaded bicycle stickers, and the folding feature can help save storage space and is easy to move. In addition, several useful features are reasonably helpful, such as the gyro brake or rotor brake feature for BMX bicycle users who like to use bicycles for freestyle.

For brand image variables, the respondents averagely have a high awareness of brand image. The results show that they like the frame shape, spare parts, colors, and other up-to-date specifications. However, if the bicycle part is damaged, the repair is complicated. According to the respondents, the famous United brand has sophisticated and unique features such as pedal assist features, steel frame, aluminum alloy or carbon, mechanical disc brakes, and rotor brakes, which can meet the needs desired by consumers. On average, respondents give a high perception of the variable of promotional appeals. According to the survey, the respondents averagely find it troublesome to get information about promotions for non-smartphone consumers, but they find promotions more attractive than competitors. Respondents say that advertising concepts such as website services introduce a different type of products to make a good impression on consumers. It also provides comprehensive and easy-to-understand promotional information for catalogs and pamphlets. It makes United bike promotions attractive and easily accessible via social media, such as consumers' testimonials. The respondents averagely give a high awareness of the purchase decisions variable. According to the survey, on average respondents choose to buy a product because they are familiar with and understand the product, do not consider trying other products, and recommend them to other people. After all, they are happy with the product and feel comfortable using it.

The following are the results of the analysis of respondents' answers to the research presented in Table 1:

Table 1. Results of Analysis of Respondents' Answers

Indicator	Answer Weight	Answer Index (%)	Average
Competitive Price (X_1)			
1. Price match with product quality	846	84.6	
2. Price match with product benefits	842	84.2	84,30
3. Affordable price	841	84.1	
Conclusion: On average, respondents have a high perception on the competitive price variables.			
Brand image (X_2)			
1. Strength of Brand Associations	820	82.0	
2. Favorability of Brand Associations	796	79.6	80.60
3. Uniqueness of Brand Associations	802	80.2	
Conclusion: On average, respondents have a high perception of brand image variables.			
Promotional appeals (X_3)			
1. Meaningful	803	80.30	
2. Believable	791	79.10	79.77
3. Distinctive	799	79.90	
Conclusion: On average, respondents are highly aware of the promotional appeal variables.			
Purchase decisions (Y)	852	85.20	82.15

1. Product purchase stability	824	82.40
2. Habits when buying a product	790	79.00
3. Recommending other people	820	82.00
4. Repurchasing		

Conclusion: On average, respondents highly value purchase decisions variables.

Based on Table 1, the competitive price variable shows that consumers focus on price compatibility indicators for product quality. It is because the price consumed meets and satisfies consumers' expectations of product quality. For brand image variables, respondents tend to agree that indicator of strength of brand associations has a better impact on purchase decisions. The strength of brand associations tends to impact consumers, as when information about a brand enters the consumer's mind, a positive message is embedded at that point that the consumer may like the product brand. In the variables of promotional appeals, meaningful indicators are highly considered by consumers because the concept of promoting that is of interest to consumers is the concept that is easy to remember and can provide meaning that is easy to recall in memory for a long time. On average, respondents agree that product stability has a high impact on purchase decisions. Product stability is more important to consumers because the product has a stable quality while the benefits meet the desired expectations. Then the consumer makes the final choice and decides to purchase the product. The following are the results of statistical tests on competitive price, brand image, and promotional appeal to purchase decisions:

Table 2. Statistical Test Results

Validity Test				
X _{1.1} = 0.878	X _{2.1} = 0.882	X _{3.1} = 0.876	Y ₁ = 0.828	
X _{1.2} = 0.816	X _{2.2} = 0.917	X _{3.2} = 0.841	Y ₂ = 0.857	
X _{1.3} = 0.850	X _{2.3} = 0.879	X _{3.3} = 0.861	Y ₃ = 0.881	
Y ₄ = 0.869				
Reliability Test				
X ₁ = 0.804	X _{1.1} = 0.697	X _{1.2} = 0.779	X _{1.3} = 0.713	
X ₂ = 0.872	X _{2.1} = 0.825	X _{2.2} = 0.782	X _{2.3} = 0.846	
X ₃ = 0.822	X _{3.1} = 0.726	X _{3.2} = 0.770	X _{3.3} = 0.767	
Y = 0.880	Y ₁ = 0.859	Y ₂ = 0.845	Y ₃ = 0.837	Y ₄ = 0.842
Normality Test				
One Sample Kolmogrov Smirnov Test		0.200		
Multicollinearity				
Nilai Tolerance		X ₁ = 0.343; X ₂ = 0.340; X ₃ = 0.357		
Nilai VIF		X ₁ = 2.918; X ₂ = 2.944; X ₃ = 2.799		
Heteroscedasticity				
X ₁ = 0.298	X ₂ = 0.597	X ₃ = 0.709		
Autocorrelation				
DU < DW < 4 - DU		1.7402 < 2.079 < 2.2598		
Correlation Test				
X ₁ = 0.731	X ₂ = 0.704	X ₃ = 0.705		
Coefficient of Determination Test (R²)				
Adjusted R Square (%)		0.597		
F Test				
F _{Count}		51.886		
Sig.		0.000		
t Test				
X ₁ = 3.322	X ₂ = 2.197	X ₃ = 2.486		
Sig = 0.001		sig = 0.030	sig = 0.015	

Based on Table 2, the data first undergo validity and reliability tests. Based on the analysis, the questionnaire data has valid and reliable results. The results of testing all questions' validity on all variables indicate that the r_{count} is greater than the r_{table} at 0.192. In addition, the reliability test shows that the value of Chronbach Alpha in each variable question shows results greater than 0.60, that is the competitive price variable of 0.804. Then the brand image variable is 0.872, the promotion appeal variable is 0.822, and the purchase decisions variable is 0.880. The analysis results show that the data that passed the classical acceptance test is from a significance value of 0.200, above 0.05. It means that the residual values are normally distributed. Each variable shows that the VIF value is less than 10. Besides, there is no multicollinearity problem since the tolerance value is more than 0.1. The results of the independent variable show a value greater than the 0.05 level of significance. Thus, there is no heteroscedasticity problem. The autocorrelation test shows that the DW value is 2.079. It means that it is greater than the upper bound (du) and less than $(4-du)$, which means that the regression model has no autocorrelation issues.

The coefficient of determination test shows that the resulting Adjusted R Square value is 0.597 or 59.7 percent. This survey does not analyze other factors that affect the remaining 40.3%, but competitive price, brand image, and promotional appeals account for 59.7% of purchase decisions. In the F test, the result of the F_{count} is 51.886 while the significance value is 0.000b. Then the value of F_{count} is greater than the F_{table} ($51.886 > 2.70$), and the significance value is smaller than the α value, which is 0.05 ($0.000 < 0.05$). So the independent variables, namely competitive price, brand image, and promotional appeals, affect the purchase decisions that is the dependent variable.

The t-test in the research shows the competitive price variable has a significant effect on the purchase decision variable, or H_1 is accepted. This hypothesis is consistent with the results of previous research, which states that competitive price affects purchase decisions significantly (Kusmadeni & Eriyanti, 2017: 51; Reven & Ferdinand, 2017). The brand image variable affects the purchase decisions variable, or H_2 is accepted. This hypothesis is based on previous findings that brand image has a significant impact on purchasing decisions (Amilia, 2017: 660) and brand image has a positive impact on purchasing intention (Wang & Tsai, 2014: 35). The variable of promotional appeals has a positive and significant impact on the purchase decisions variable, or H_3 is accepted. This hypothesis is consistent with the results of research which states that promotion has a positive and significant influence on purchase decisions (Weenas, 2013: 617) and with research that states that sales promotion has a significant impact on purchase decisions (Neha & Manoj, 2013: 13)

Conclusion

Based on the findings, there are several points to be noted. Firstly, each variable, namely competitive price, brand image, and promotional appeals, has a positive and significant impact on the purchase decisions of the United Bike at CV Sukses Indah Sepeda Pontianak. Second, agents must consider the affordability and rationality of prices along with the quality and benefits of their products when setting competitive prices for their management impact. They also need to improve their brand image. By having a positive and trustworthy brand image, the brand will be more popular, as well as an attractive promotional appeal concept, supported by a complete and easy-to-understand explanation. The limitation in this research is the coefficient of determination on CV Sukses Indah Sepeda Pontianak. The value of Adjusted R Square is 0.597 or 59.7 percent. It shows that competitive price, brand image, and promotional appeal in this research have the ability of 59.7 percent in purchase decisions. On the other hand, other factors that influence purchase decisions are the remaining 40.3 percent. However, based on the respondents' answers to the survey, they do not always show the actual situation, which limits the research.

The author suggests that companies pay more attention to the price affordability of bicycle products in setting a competitive price. The company can also research market conditions to

ensure that the price is even with the consumers' purchasing power. Companies must ensure that the existing positive brand image can be maintained and introduced more widely to increase consumer confidence in the United brand. The promotional appeals can also provide trustworthy promotion so it can influence consumer purchase decisions. The company can offer complete promotional information to increase consumers' trust in the company. For future researchers, the author suggests adding other variables, such as product quality and word-of-mouth related to purchase decisions variables. Thus, they can provide a broader picture of factors that affect purchase decisions besides competitive price, brand image, and promotional appeals.

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IMPACT OF FOREIGN ECONOMIC FACTORS TOWARDS TOURISM RECEIPTS IN MALAYSIA: INDONESIA, THAILAND, PHILIPPINES, AND VIETNAM

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Abstract: This study is conducted to examine the impacts of tourism receipts in Malaysia towards foreign economic factors in Indonesia, Thailand, The Philippines and Vietnam countries. Many benefits will be obtained by accessing foreign economy factors. There are many factors that obstruct the ability in attract tourism to visit Malaysia countries. The macroeconomics determinants are gross domestic product, inflation rate, and exchange rates with the time series from 2003 to 2017, annually. The method adopted is the panel unit root tests, panel cointegration tests, FMOLS, and panel Granger causality. The study findings are that all exogenous variables are cointegrated. However, in the short run, there is only unidirectional causal relationship.

Keywords: Tourism Receipts; GDP; Inflation rate; Exchange rate

Introduction

In the world today, tourism is a major industry that achieved major development economically in every country. According to the World Tourism Organization (2007), tourism is one of the faster growing sectors in an economy and the main source of income for most of the developing countries. Tourism industry well known in worldwide because it is world’s biggest export earner. Tourism is one of the primary sources of income for Malaysia. Presently, in Malaysia tourism among the quickest developing industries in the services sector and the second highest gross domestic product (GDP) which is contributing to those industries.

Figure 1: Tourist Arrivals in Malaysia from year 2003 to 2017

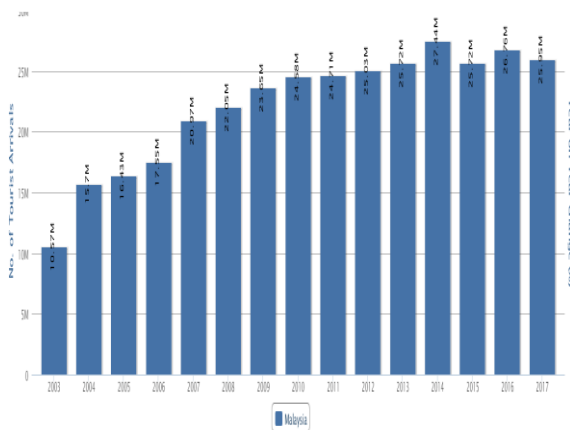
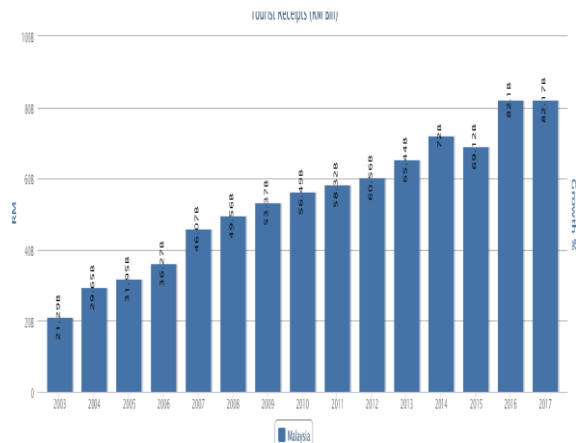


Figure 2: Tourist Receipts in Malaysia from year 2003 to 2017



Sources: Malaysia Tourism

Figures 1 and 2 show that the total contribution of tourist's arrival and tourism receipt to Malaysia GDP and its growth rate from 2003 to 2017. It is clearly shown that the contribution of tourism receipt had increased steadily over time and noticeable that there were drop in year 2015. Tourism income generated from foreign arrivals rose from RM 21.29 billion ringgit to 82.17 billion ringgit in year 2003 to 2017. Besides that, there is a huge development in tourism industry which also contributed positively to the expansion of activities. However, the development takes place not only in tourism industry, it is also undergoing in sub-sectors like the tour industry hotels, restaurants, travel and retail as well as transportation.

To sustain the huge growth within the tourism industry, the number of tourist arrival plays an important role. This is because the number of tourists who came to visit Malaysia especially Sarawak resembles tourists' direct expenditures during their vacation to that particular country and state. The major contribution from tourist receipts is significantly towards national income. The main purpose of revenue earned from tourists' receipts is to enhance the country's economy in order to attain its target as a high-income economy status in 2020. (Malaysia Tourism, 2019). Thus, this study aims to to examine the impacts of tourism receipts in Malaysia towards foreign economic factors in Indonesia, Thailand, The Philippines and Vietnam countries.

Literature Review

The tourism industry is a well-known industry that contributes to the economics growth in many countries. Many past studies have included tourism industry in their research including Lau et al. (2008), Eugenio et al. (2004) and Bouzahzah & Younesse (2013), Puah et al. (2014). The study of tourism industry by Lau et al. (2008) found that tourism industry is one of the income earners that attracts great interest from a policy perspective for continuous economic growth in state. The results are also supported by Du et al. (2014) in his recent study when he found that an increased tourism production is related to GDP increases. In the analysis of tourism-led growth, number of researchers used tourism receipts in their studies. According to Eugenio et al. (2004), Puah et al. (2014), and Chiu and Yeh (2017), tourism receipts have a significant impact on economic growth. For example, Eugenio et al. (2004) found that spending by international tourists will stimulate the development of tourism as well as investment in human capital, thereby contributing significantly to economic growth.

On the other hand, to enhance the tourism receipts in the country, government and NGOs should take the role and cooperate to establish a variety of the tourism product and activities. This is one of the way to attract more tourist and encourage tourists to increase their expenditure in the travel destination (Du et al. 2014). Hence, a varieties of tourism packages such as Cuti-Cuti Malaysia was establishing and promoted in 2015 to encourage more local Malaysians and international tourists to travel to nearby places in the Malaysia for their next weekend getaway. As a result, the government can gain more income through the tourist spending therefore fostering economic growth (Lau, 2008). Theoretically, inflation is one of the economics factors that influences tourism demand in the industry. This is because, inflation reflects a decreases in the purchasing power per unit of money and led to the fluctuation in the tourism receipts. According to Addington (1993), inflation is generally defined as a sustained rise in the overall price level and may be a consequence of several factors, which are ultimately captured by changes in costs, or by demand-side influences. This is also supported by Hafiz et al. (2010) where they found that an increase in the rate of inflation or the CPI leads to a reduction in the number of people visiting a country. However, when the inflation deceases, more tourists will visit the host country where they find the country are less costly in terms of

accommodation and transportation (Teles, 2004; Tang & Lean, 2007). This is strongly supported by Dwyer and Forsyth (2009) since tourists normally spend a limited amount of time aboard, it is unlikely that the inflation will have a significantly impact unless the host country experiences hyper-inflation or some other local economic crisis.

Nevertheless, the tourism sector is shown to be one of the first casualties of economic growth in periods of high inflation or deflection especially in the developing countries. A study of Inflation-led growth by Emanuel (2002) indicated that tourists can also prevent currency conversion fees or poor conversion rates and have a better understanding of the real cost of things relative to their country of origin. Therefore, dollarisation is clearly a way of preventing monetary instability and citing evidence that while inflation declines significantly after dollarization, gross domestic product is rising. (Bloch et al. 2005). Generally, exchange rate is one of the main factors that influences the tourism demand. A study by Khadaroo and Seetanah (2007) found that tourism demand in choosing their destination can be influenced by the changes of exchange rates. Changes in exchange rate will affect the currency value of the origin country. This had been provided by Crouch (1993) where the changes in exchange rates will affect the price of international travel and tourism industry in the country. Thus, the exchange rate is one of the important determinations of travel destination (Webber, 2001).

Thus, the exchange rate will directly give the influences to the tourist's travel decision and the selection of the travel destination (Chong, Lean & Hooy, 2014). Agiomirgianakis, Serenis and Tsounis (2015) agreed by saying a higher exchange rate will affect the travel performance of a country and thus will lead to a change in their business. Tourists would choose a country with lower fluctuation of exchange rate compare to country with high exchange rate fluctuation. In other words, travellers or tourists from the develop countries were preferred to choose to travel to a country which is less wealthy due to the lower exchange rate of the money currency of the country (Lean, Chong & Hooy, 2014). Therefore, the flows of foreign currency offerings will influence the appreciation of destination countries' currency exchange rate (Obstfeld and Rogoff, 1996). The conventional theories suggest the exchange rate of demand contributed to the influx of tourists. In the study by Afdi et al. (2012), the growth of foreign exchange and the movement of the rupiah between 1998 and 2010 does not necessarily constitute and ideal form of relationship, in line with the context set out above.

Methods

The study is conducted to find the relationships between independent variables and dependent variables. The independent variables in this study are Gross Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER) while Tourism Receipt in Malaysia as dependent variables. In this paper, the researchers want to examine the determinants that influences the Tourism Receipts in Malaysia. Moreover, the researchers also want to investigate which economics factor are strongly correlated with the Tourism Receipt. Thus, the regression model in this study is written as below:

$$TR_{i,t} = \beta_0 + \beta_1 GDP_{1it} + \beta_2 IR_{2it} + \beta_3 ER_{3it} + \epsilon_{it}$$

Panel Unit Root Test

Unit root test is a first steps before cointegration test to investigate the non-stationarity of the variables in level & first different. A panel individual unit root tests in this study was using

Levin et al. (2002) and Im et al. (2003) test based on the researcher of Maddala & Shaowen (1999) and Jayaraman & Lau (2008). Therefore, the null hypothesis for unit root test is non-stationary. It is to be noted that all of the variables are non-stationary in the levels but shows the statically significant at the first difference of the variables. Thus, we must reject the result for null hypothesis at the 5% of level when the variables are taken in first difference.

Panel Cointegration Test

The cointegration test is the second step after the unit root to examine the long run relationship or cointegrated among variables. In cointegration test, we use Pedroni (2000) test for variables in this study. This approach more significantly compare to the conventional cointegration tests that applied on a single country series. Therefore, Pedroni (2000) are employed a several test statistics to examine the residuals for stationary of the variables. Due to Pedroni (2000), LLC and IPS tests are more accurate for small sample properties than the other tests.

Panel Fully Modified OLS (FMOLS) Estimates

Philips and Hansen (1990) initially introduced and developed the FMOLS methods to estimate a single cointegrating relationship which has a combination of I(1). The FMOLS method generates accurate estimates for limited sample size and provides a check for robustness of the results. According to Kenney & Nnamdi (2019), panel group mean FMOLS is used to find out the long run estimates of the cointegrating relationship, which follows the work by Pedroni (1999, 2004) and Koa (1999). The FMOLS procedure accommodates the heterogeneity that is typically appears in both long run cointegrating relationships and transitional serial correlation dynamics.

Panel Granger Causality Test

The Granger causality test used to estimate the vector error correction (VECM). The significant of the first differenced variables provides evidence on the direction of the short-run causation while the significant of the t-statistics on the one period error correction term, ϵ_0 denotes long-run causation. The short run causality can be tested via the optimal lag according to Schwarz criterion is 2. Below is the equation;

$$\Delta TR_t = \alpha_0 + \sum_{k=1}^m \phi_1 \Delta TR_{t-1} + \sum_{k=1}^m \phi_2 \Delta GDP_{t-1} + \sum_{k=1}^m \phi_3 \Delta ER_{t-1} + \sum_{k=1}^m \phi_4 \Delta IR_{t-1} + \mu_1 ECT_{t-1} + s_1$$

Findings

Panel Unit Root Results

According to Levin et al. (2002) and Im et al. (2003), it is suggested that there are non-stationary in level form, but become stationary after first differencing I(1). Thus, all the variables in first difference should be stationary or no unit root exist. In LLC and IPS tests, majority of the variables are smaller than the significant value in significant level of 5% (1.96) in I(0) of both individual intercept and individual intercept and trend, which means that variables are not stationary and had existence of unit root. In first difference I(1), all the variables are larger than significant value, hence the null hypothesis of unit root exists is rejected. Therefore, it can be concluded that all variables are stationary in I(1), which unit root does not exist. In conclusion,

the findings that all the variables have the same order of integration allowed us to continue with cointegration test.

Table 1: Levin, Lin & Chu (LLC) Panel Unit Root Test Results

Variables	Test Statistics	
	Levin, Lin & Chu	
	Level	
	Individual Intercept	Individual Intercept & Trend
Δ LTR	-0.27838 (0.3904)	0.04390 (0.5175)
Δ LGDP	-1.05673 (0.1453)	-0.13198 (0.4475)
Δ LIR	-0.86873 (0.1925)	-0.53838 (0.2951)
Δ LER	0.25219 (0.5996)	0.58256 (0.7199)
1 st Difference		
Δ LTR	-3.81047 (0.0001)**	-3.37717 (0.0004)**
Δ LGDP	-9.98170 (0.0000)**	-9.79122 (0.0000)**
Δ LIR	-9.49669 (0.0000)**	-7.61832 (0.0000)**
Δ LER	-3.85396 (0.0001)**	-4.23561 (0.0000)**

Notes: The LLC investigate the null hypothesis of non-stationary of variables. The parenthesized values are the probability of rejection. Asterisks (**) indicates statistically significant at 5% level.

Table 2: IM, Pasaran and Shin (IPS) Panel Unit Root Test Results

Variables	Test Statistics	
	IM, PESARAN AND SHIN	
	Level	
	Individual Intercept	Individual Intercept & Trend
Δ LTR	-0.47970 (0.3157)	0.54372 (0.7067)
Δ LGDP	-0.61664 (0.2687)	-0.13366 (0.4468)
Δ LIR	1.54315 (0.9386)	0.42966 (0.6663)
Δ LIR	-0.10749 (0.4572)	-1.07691 (0.1408)
1 st Difference		
Δ LTR	-3.24808 (0.0006)**	-1.94137 (0.0261)**
Δ LGDP	-7.70709 (0.0000)**	-6.49201 (0.0000)**
Δ LER	-2.01413 (0.0220)**	-2.37117 (0.0089)**
Δ LIR	-7.37417 (0.0000)**	-5.75250 (0.0000)**

Notes: The IPS investigates the null hypothesis of non-stationary of variables. The parenthesized values are the probability of rejection. Asterisks (**) indicates 5% significant level.

Panel Cointegration Test Results

The results of panel cointegration test shows that the null hypothesis of no cointegration cannot be rejected for all variables at 5% significant level. From the panel cointegration results, which determines the strong evidence to reject the null hypothesis of no cointegration of seven statistics provided by Pedroni (1999 & 2004). In reference to Table 3, the results show that there

are only two out of seven statistics are rejected with 5% significance level which is panel LLC and IPS statistics. And for the group PP and ADF statistic are rejected with 10% significance level. Thus, it shows that the statistics have strong evidence to reject the null hypothesis, H_0 of no cointegration. Meanwhile, in Kao (1999) test, the probability is also smaller than level of significant, thus must be rejected. Hence, it is found that LGDP, LIR, and LER are cointegrated in the multi-country panel setting for the sample period and moving together. Hence, the results indicated that the variables do share a long run equilibrium relationship between the countries.

Table 3: Panel Cointegration Results

A. Pedroni Residual Cointegration Test	
Panel cointegration statistic (within-dimension)	
Panel v-statistic	-0.5935 (0.7236)
Panel PP-statistic	0.2151 (0.5852)
Panel PP-statistic	-1.6883 (0.0457)**
Panel ADF-statistic	-1.7036 (0.0442)**
Group mean panel cointegration statistic (between-dimension)	
Group rho-statistic	1.3419 (0.9102)
Group PP-statistic	-1.4359 (0.0755)*
Group ADF-statistic	-1.3452 (0.0893)*
B. Koa Cointegration Test	
ADF	-2.7112 (0.0034)**

Notes: Lag truncations for Pedroni statistics is 2 while Kao ADF statistic is 3. Asterisks (**) indicates 5% significant level where (*) indicates 10% significant level.

Fully Modified OLS Estimates

The results in Table 4 shows the elasticity estimate of TR in Malaysia with respect to IR is -0.3837, means that when one percent rise in IR of foreign countries will decrease the TR of Malaysia by 0.38 percent. This supports the conventional view that there exists correlation between TR and IR. In other words, when the inflation rate in foreign country increases, the TR in Malaysia decreases due to the less purchasing power of the tourist in Malaysia. The evidence also can be found on part research by Eugenio et al. (2004); Lau et al. (2008); Du et al. (2014); Puah et al. (2014), and Chiu & Yeh (2017).

For ER, the elasticity estimation of TR in Malaysia with respect to ER is -2.5061, indicating that when ER in foreign country raise by one percent, will lead to the decrease in TR of Malaysia by 2.51 percent. This indicates that when value of the MYR increases, tourists need to pay more to have Malaysian currency. Thus, the purchasing power of tourist in Malaysia country will decrease, especially when value of Ringgit Malaysia is higher than the currency in tourist countries. This finding is supported by Vita & Kyaw (2013), when the currency of the country devalues, international tourism become less expensive, leading to increased foreign tourists visiting that country. These results also tally to the past study results of Teles, (2004); Tang & Lean (2007); and Dwyer & Forsyth (2009). This supports the conventional view that there exists strong correlation between TR in Malaysia with ER of foreign countries.

Moreover, the findings show that GDP in foreign country is positive but not significant to TR in Malaysia. This denotes that GDP in respective country is one of the important criteria for the tourist but not directly affect the decision of the tourist's purchasing power and TR inflows

in Malaysia. Hence, foreign tourists do handle, IR and ER of their country as a criteria in decision making on visiting Malaysia but not for GDP.

Table 4: Fully Modified OLS Estimates Results

	Δ LGDP	Δ LIR	Δ LER
Panel Group	0.2218 (0.2312)	-0.3787 (0.0272)**	-2.5061 (0.0000)**

Notes: Variables are in log form. Asterisk (**) shows significance at 5 % level.

Panel Granger Causality Result

The empirical findings presented in Table 5 are summarised as follows. The coefficient of the error correction term (ECT) is statistically significant, indicating there is a long run causality relationship running from the variables TR, GDP, IR, ER. Besides, there seems to be a strong short run causal relationship running from coefficients of the three variables. Furthermore, there is a short-run causality running from GDP to IR, and ER to TR. The causality is unidirectional causality between GDP to IR, and ER to TR.

Moreover, TR and IR appear to be the initial receiver of any exogenous shocks which disturb the equilibrium of the panel system. This is evidenced in the statistically significant ECT in the TR and IR equation in the panel system. The coefficient of ECT in TR equation is 0.0979 indicating that about 9.79% of the adjustment is completed in a year. However, for IR, the coefficient of ECT is 0.7297 which means that about 72.97% of the adjustment is completed in a year.

Table 5: Panel Granger Causality Results

Dependent Variables	χ^2 statistics				ECT	
	Δ LTR	Δ LGDP	Δ LIR	Δ LER	Coefficient	T-Statistic
Δ LTR	-	0.0015 (0.9694)	0.1225 (0.7263)	4.6566 (0.0309)**	-0.0979**	-2.0301
Δ LGDP	1.3907 (0.2383)	-	0.2212 (0.6281)	0.8126 (0.3673)	-0.0118	-0.0920
Δ LIR	0.2474 (0.6189)	6.3722 (0.0116)**	-	0.0036 (0.9524)	-0.7297**	-4.2427
Δ LER	0.2608 (0.6096)	0.6610 (0.4162)	0.2117 (0.6455)	-	0.0327	2.8416

Note: The χ^2 - statistics test the joint significance of the lagged values of the independent variables, and the significance of the error correction term(s); Δ is the first difference operator; figures in the parentheses are the *p*-values. Asterisk (**) denotes the 5% significance level.

Conclusion

This study is conducted to examine the impacts of foreign economics factor towards tourism receipts in Malaysia for four foreign countries, Indonesia, Thailand, the Philippines, and Vietnam by applying a panel analysis approach. The time series of the data is for 15 years (2003-2017), where there are 60 observations. Besides, the data is recorded annually. The macroeconomics determinations are GDP, IR, and ER. GDP is a GDP of foreign country per capital as proxy. IR and ER were applied as the measurement of CPI.

In the macro panel model, the methodology adopted are panel analysis of unit root tests, cointegration tests, FMOLS, and granger causality tests. This paper has found and presented evidence that inflation rate and exchange rate are the important factors to increase the TR inflow in Malaysia. Besides, the findings showed that all of the variables are stationary at I(1). On the other hand, panel cointegration tests indicate that there is significance between Malaysia's tourism receipts, GDP, IR, and ER for foreign country.

Moreover, the FMOLS estimation results shows only IR and ER are negatively significant to TR inflows in the long run, while for GDP of foreign countries does not show significance to TR, although GDP is in positive relationship with TR. Subsequently, the panel Granger causality results show that causality linkage runs from GDP to IR, and ER to TR only in short run. Another explanation is there are only two unidirectional causalities in the short run as well.

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The Environmental Disclosure of Fast Fashion Industry and Its Sustainability During COVID-19

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Abstract: Fast fashion industry is one of the biggest contributors to environmental pollution. Therefore, environmental responsibility for fast fashion companies is crucial. This study aims to investigate the environmental disclosure in the annual report of Hennes and Martinz (H&M) and its sustainability during COVID-19. The object of research is the 2019-2020 sustainability report, as well as articles that will be researched using content analysis methods. According to the conducted content analysis, environmental disclosure has a role as an added value for stakeholders because environmental awareness has emerged globally. Environmental disclosure increases the value of the company from a public perspective. Environmental disclosure becomes a standard reference for the company's future to preserve the environment, so that its impact on sustainability is considerably high.

Keywords: environment, sustainability, COVID-19

Introduction

Humans cannot live without clothing, thus its necessity is unquestionable and its existence is taken for granted. However, little is known about the apparel industry's role in contributing to global environmental pollution, second only to the oil industry (Sollano, 2017). The production and distribution of clothing, the processing of materials and textiles, and all of these activities together have a significant environmental impact. Particularly, the emergence of "Fast Fashion" in the past two decades as a response to change in the fashion industry has clarified outstanding issues including low cost, flexibility in design, quality, delivery, and speed to market (Bhardwaj and Fairhurst, 2009).

Since today's most pressing issue affecting the global community is not solely economic in nature, the apparel industry's crisis has altered people's perspectives. The community is now starting to face a number of social and environmental issues that endanger their way of life. This can be seen from the increasingly angry problems of social and environmental conditions, such as violation of human rights, social inequality and poverty, the increasingly scarce supply of food due to increased consumption and population, natural problems due to environmentally friendly construction systems, water pollution due to waste, pollution, damage to forests, and damage to the ozone layer which results in global warming and acid rain to climate change, which in turn will spread to become an economic crisis that occurs throughout the world.

This serves as a catalyst for the creation of worldwide problems related to environmental harm, climate change, global warming, and social crises, which eventually spread and turned into an economic crisis that would be detrimental to the company's ability to survive. The company seeks to develop its business by utilizing the development of information as a means to obtain additional capital to expand the business in all ways so that the orientation of the company will be more of a concern to the Shareholders and Stakeholders, along with the issues and the development of the economy that supported by the development of information.

Burhan and Rahmati (2012) contend that the failure of financial conditions alone to ensure sustainable corporate value is attributable to stakeholder demands for information about the company's non-financial performance, including its environmental and social performance, in

addition to its financial performance. In recent years, extra information, such as that relating to the environment, society, politics, and economy, has begun to be disclosed in an integrated manner with the annual report of the company, also known as the report on corporate social responsibility. The Sustainability Report (SR) is a method of corporate social responsibility for the environment and social responsibility without reducing the company's capabilities. This obligation's execution must take local populations around the site of the commercial activity into account and respect their cultural traditions. SR is the idea that a business must consider its obligations to stakeholders such as customers, employees, shareholders, the community, and the environment in all facets of business operations. The company's sustainability will be impacted by the execution of the SR continuing report.

In order to address the inadequacies of a company's own financial statements, non-financial information is required. Stakeholders and shareholders have recently demanded non-financial disclosures to aid in decision-making. Non-financial reports have also evolved into required demands for more data on a corporation. Non-financial reports, which include social, environmental, and human rights data from businesses, are now crucial in reducing public anxiety over environmental challenges, which is on the rise. As a result, non-financial reports can help businesses meet the needs of stakeholders and shareholders when making decisions.

The majority of shareholders regard disclosure of various environmental information items favorably, and they want environmental disclosures to be made voluntarily in the future, audited, and published alongside annual reports as well as on the company's official website. Shareholders cite corporate responsibility for actions that have an adverse effect on the environment as the main justification for wanting corporations to disclose environmental information. Results will also have ramifications for regulatory policy and have tremendous potential for corporate governance and management decision-making (Villiers and Staden, 2012)

Non-financial reports that provide environmental information should be able to assist individuals and the business in understanding its environmental impact when making decisions (Milne and Patten, 2001). This is a worry for investors' decision-making processes. Investors also give environmental considerations more weight in their choices because they believe that the general public will value an ecologically friendly business more. As is clear from the information provided, the investor's judgments will be influenced by the quantity and quality of the information provided. It's fairly typical for businesses to produce reliable, timely, comparative, and consistent reports (Dhayan, 2018).

I choose to bring up the topic of environmental reporting in the clothing industry because in Indonesia people tend to concentrate on mining, oil, power plants, etc., while research on the clothing industry is uncommon and, generally speaking, even when it does exist, it seems to be focused on ethical consumption rather than the environmental issues that the clothing industry faces. Studies that focus on assessing environmental impacts are uncommon when the subject of environmental reporting by organizations is brought up. Research on social and environmental reporting appears to concentrate more on examining the language used in reports, such as "green-washing," and how environmental communication mirrors actual corporate conduct (Delmas and Burbano, 2011; Mason and Mason, 2012). (Cerin, 2002). Many in-depth studies on environmental reporting concentrate on how environmental reporting relates to the larger environmentalist discourse or how environmental reports react to institutional forces (Buhr and Reiter, 2006). (Laine, 2009). This is what inspired me to conduct study on the garment industry's environmental reporting.

To determine whether the inclusion of non-financial reporting has any bearing on the company, this study uses the Hennes dan Mauritz (H&M Group) annual report as its sample. In this thesis, H&M is one of the major revenue- and sales-producing fast fashion brands because of its dominant market position (Greenpeace, 2014). The assertion made by Caniato (2012), who stated that H&M is allegedly one of the most exposed clothing industries to the public, supports my decision to use H&M as my study object. A further reason for choosing H&M is the advent

of environmental labels on garments, which has increased public interest in the issue of clothing manufacturers' environmental responsibilities.

Literature Review

Fast Fashion

According to Wikipedia, the word "rapid fashion" refers to how quickly design develops on the runway, as in the case of the latest fashion trends (Hines, Tony, and M. Bruce, 2001). The second definition, which is crucial, should also include the fact that fast fashion goes straight from the runway to the store to the consumer—and then straight to the garbage. The fast fashion apparel line is based on the newest trends in fashion that are displayed at Fashion Week every spring and fall (Muran and Lisa, 2007). The focus is on streamlining specific elements of the supply chain so that these trends can be created fast and affordably and then produced in order to allow mainstream people to purchase contemporary apparel styles at cheaper prices. This fast manufacturing philosophy at an affordable price is used at major retailers such as H&M, Zara, CandA, Peacock, Primark, Xcel Brands, and Topshop.

Due to limited factory design capabilities, clothing was produced on a big scale with low costs and simple stylistic variation until the mid-1980s (Brooks, 1979). The factory that makes work clothes exclusively makes work clothes; if it had to make other things, it looked to be "truly hurting yourself" (Bailey, 2001: 35). However, there are still some exceptions to the style of women's clothing and haute couture, which largely determines sophisticated and opulent clothing that supports high-income and social status market segments. Items like jeans, men's shirts, trousers, and underwear with designs that have changed slightly over several rounds; (Brooks, 1979; Mazza and Alvarez, 2000; Bailey, 2001). Prior to the 1990s, customers were evidently less concerned with style and fashion, favoring instead more straightforward attire (Bhardwaj and Fairhurst, 2010); but, after that time, they developed a greater awareness of fashion (Bailey, 2001). According to Bailey and Eicher (1992), there was a rapid rise in the importation of women's apparel in the early 1990s that was more attractive and fashionable than the uniform clothes of the 1980s. Clothing stores eventually started expanding their product lines with new and "refreshing" products in response to emerging fashion trends, diverging from the original plan's initial focus on lowering manufacturing costs (Barnes and Lea-Greenwood, 2006). At the same time, there have been significant changes in consumer demand, and contemporary women in updating and refreshing their closets more often than they are used to, even in a single fashion season (Mintel, 2003; Barnes and Lea-Greenwood, 2006). In addition, it is a growing trend for the fashion business to increase the number of 'seasons', which means the frequency of changing all products in the store; in the case of successful clothing retailers such as H&M, Zara, there may be as many as 20 micro seasons per year (Christopher et al., 2004). Tyler et al. (2006) also noticed the same trend of retailers launching more phases (3 - 5 phases) with traditional seasons in Spring / Summer and Autumn / Winter. Crewe and Davenport (1991) cited in Tyler et al. (2006) show that garment suppliers are increasingly expected to introduce products in smaller batches in a shorter period of time due to an extension of the number of micro seasons.

The idea of "fast fashion," also known as "quick fashion" or "street fashion" in Europe, started to emerge around this time, capturing the change in the fashion industry that occurred at the time (Guercini, 2001; Doeringer and Crean, 2006). Fast fashion is described by Barnes and Lea-Greenwood (2006: 4) as "a business strategy that aims to reduce the processes involved in the buying cycle and lead the time to put new fashion products into stores, to meet consumer demand at its peak" and was initially developed in France only to satisfy the demand of teenagers and young adult women for trendy and affordable clothing. Fast fashion, according to the study, is mostly a consumer-driven phenomenon that "reacts to the season to optimize sales by responding to and satisfying public demand." Fast fashion, according to Christopher et al. (2004), Doeringer and

Crean (2006), is the ability to quickly identify fashion trends, identify the potential of new modes, and transform them into products that are ready on the shelf in the shortest amount of time. This clarifies how the concept of fast fashion revolves around responses to changes in style, trends, and demand. The ability to recognize patterns and foretell the future—also known as "knowledge of a common situation"—is said to be a key factor in the success of some of the forerunners in the fast fashion sector (Sull and Turconi, 2008)

Sustainability Reporting

Economic, social, and environmental aspects of an organization's performance are covered by sustainability reporting (Hubbard, 2011). To date, sustainability reporting has changed from being a compilation of environmental reports to environmental reports now containing additional information, such as health and safety data. It has been decided, beginning with the use of sustainable development terminology. Because sustainability embodies responsibility, it can be viewed as a component of accounting (Buhr and Reiter 2006). The term "accounting" can be used to refer to the entire process, from data collection to reporting. Reporting is the stage of the sustainability accounting process that has a clear end result that is also part of the process that is most widely accepted by the public and the visibility of the report (Laine, 2009). Although measuring sustainability performance can be difficult, it is possible to do so using a number of social science, economic, and financial analysis tools (Epstein and Rejc Buhovac, 2014). The finished product, the sustainability report, may be posted online, as a standalone document, or as an annual report together with financial data (Laine, 2009).

Due to the voluntary nature of sustainability reporting, there are no mutually accepted criteria to govern the reporting process (Epstein and Rejcn Buhovac, 2014; Hubbard, 2011; Hubbard, 2009). Certain industries and nations may have unique criteria for reporting processes (Deegan, 2002; Laine, 2009). For instance, sustainability reporting is required by the stock markets in Paris and Johannesburg (Hubbard, 2009). The most widely used framework for sustainability reporting is the Global Reporting Initiative (GRI; 2011; Hubbard; 2011; Törnroos; 2005).

The reasons why corporations choose to provide social and environmental data can be influenced by a variety of factors. Organizations frequently opt to submit sustainability data from the west and are assigned to environmentally delicate industries like chemicals, mining, or oil (Laine, 2009). Adams (2002) claims that additional factors like corporate culture, size, and age, as well as the political, social, and economic circumstances in the nation of origin, might influence whether or not a corporation declares sustainability.

It has been extensively researched why sustainability reporting is acceptable. A frequent justification for changing a company's mind about publishing a sustainability report has to do with strengthening the organization's reputation or motivating social activism from various interest groups to obtain credibility (Adams, 2002; Deegan, 2002; Islam and Deegan, 2008; Islam and Wise, 2012). The role of global media can be significant in influencing managerial decisions for sustainability reporting, because the media can influence and make public judgments such as by promoting various scandals and accidents involving organizations (Islam and Wise, 2012). Likewise, increased media attention is related to increasing public awareness (Deegan, Rankin and Tobin, 2002) and organizations that want to take responsibility for the wider global community for their social and environmental improvement (Islam and Wise, 2012). The number of reports discussed across the industry, not only in the instance of the company in question, can be impacted by some specific incidents, such as oil spills or other environmental calamities (Adams, 2002; Deegan, 2002; Islam and Deegan, 2008). Non-Governmental Organizations (NGOs), in addition to the media, also speak for significant interests that can request clearance and utilize a variety of networks to their advantage (Islam and Wise, 2012). The production of a sustainability report can also be motivated by financial gains, thus a company's reputation is not everything. It claimed that financial markets and investors may benefit more from sustainability reporting (Islam and Deegan, 2008; Laine, 2009).

Researchers have a number of issues with reporting on sustainability. Deegan (2002), for instance, asks if sustainability reports actually do what they say they do and whether they satisfy all requirements of the triple bottom line, recognizing the interdependence of economic, social, and environmental factors. As a result, it is necessary to criticize sustainability reports for being overly concerned with the environment and for limiting access to "eco-efficiency" and social sustainability (Deegan, 2002; Hubbard, 2009). Additionally, it is criticized that economic data are not connected with sustainability reports (Hubbard, 2011; Hubbard, 2009). The benefit of sustainability, which lasts longer than what has to be improved to be integrated with organizational performance, is one aspect that needs to be enhanced (Epstein and Rejc Buhovac, 2014). The fact that it addresses the work done to gather data on sustainability as well as addressing the demands of management, affiliated groups, and requirements outside of the reporting process is another reason for criticism (Hubbard, 2009). Another issue cited by researchers is the excessive frequency with which reports are required on descriptive outcomes, with little focus on providing particular aims, figures, or relation between the information presented (Hubbard, 2009). Similarly, rather than placing a wager on the reputation of the company, sustainability reports are frequently issued on strong reports (Adams, 2002; Comyns, 2013; Hubbard, 2011; Laine, 2009; O'Dwyer, 2001).

Sustainability

Sustainability is defined as understanding how natural systems work, maintaining diversity, and producing everything required for this natural ecology to remain in balance. This study also acknowledges the necessity for resources for human civilization in order to preserve our contemporary way of life. Sustainability takes into account how we can coexist peacefully with the natural environment while defending it from harm and exploitation. The goal of sustainability and sustainable development is to strike a delicate balance between two competing needs: the desire to advance technologically and economically and the need to safeguard the environment in which we and other people live. Sustainability is not only about the environment, it is also about our health as a society in ensuring that no person or area of life suffers from environmental laws, and also about examining the long-term effects of human actions.

The United Nations World Commission for Environment and Development defined "sustainability," often known as "sustainable development," as the capacity "[to] meet present demands without growing capability" (1987: 41). Resolution "meets the needs of stakeholders without reducing its potential to satisfy their needs in the future" at the organizational level of sustainability, to be more precise (Hockerts, 1999: 32). However, managers frequently equate corporate sustainability with economic success, overlook the other two, and concentrate on maximizing shareholder value, market share, and innovation. This is how companies view sustainable development from their perspective (Bansal, 2002). Sustainability can be felt differently depending on the strategy of each organization, whether as "compliance issues, costs to be minimized, or opportunities for competitive advantage" (Hubbard, 2009: 181).

Economic development, social development, and environmental protection are the three pillars of sustainability. We all need to be aware of what we can do to protect the environment, whether it be through recycling, reusing, lowering our power consumption by turning off electronics rather than leaving them on standby, walking short distances rather than taking public transportation, or even purchasing used items. Businesses are designed to avoid pollution and produce less carbon dioxide. Renewable energy installation is encouraged in both our homes and workplaces. The third pillar is environmental conservation, and for many people, this is what humanity's future will look like. It outlines how we must investigate and safeguard the ecosystem, the quality of the air, the integrity and sustainability of our resources, and concentrate on factors that strain the environment. It also has to do with how technology will help us achieve a greener future; the EPA understands that biotechnology and technological advancement are essential to achieving this sustainability and works to safeguard the environment from any future harm that could result from these developments.

Corporate Social Responsibility

Corporate social responsibility (CSR) is a philosophy that appears as a strategy employed by businesses or organizations to address the social and environmental effects of their operations (Jedrzej George Frynas, 2009: 1). The longer, the higher the bar is for businesses to uphold their ethical and environmental obligations. CSR is no longer viewed as a cost to the business but rather as a type of corporate ethics in the form of charitable endeavors. In addition to achieving objectives in maximizing benefits and obligations to stakeholders, CSR is a perspective on the company and its position in society that is thought of as the company's goal (Chandler and Wether, Jr., 2014: 6). CSR includes the relationship between a company or organization and the community around the company or organization. CSR defines society broadly, at various levels, to include all the stakeholder interests and group elements to maintain interest in the company's operations. Some definitions of CSR from various countries (Chandler and Wether, Jr., 2014: 9):

1. United Kingdom: CSR is a matter of business and other organizations to manage the impact of its activities on the environment and society beyond the law. In particular, this includes how the organization interacts with employees, suppliers, consumers, and the community around where it operates, and all matters relating to protecting the environment.
2. United States: CSR is related to how companies manage business processes to produce things that have a positive impact on society.
3. European Union: CSR is a process for integrating social, environmental, and attention to human rights in carrying out business operations and being a major component in dealing with its stakeholders.
4. United Nations: CSR can be understood as a management concept and process that integrates social and environmental concerns in business operations and company interactions with stakeholders.

From the aforementioned sources, it can be inferred that corporate social responsibility, or CSR, is an action taken by a company or organization towards the social and environmental aspects of its operations.

Methods

This study was carried out using qualitative research methods. Because the emphasis is on quality rather than number, qualitative research offers the most comprehensive data analysis (Eskola and Suoranta, 1998). Compared to quantitative studies, qualitative studies are more influenced by the underlying assumptions, values, and objectivity of the researchers because they attempt to explain and uncover rather than simply confirm the conventional "truth" (Hirsjärvi, Remes, and Sajavaara, 2007). Since the goal of this study is to provide the most comprehensive description of the environmental reporting methods of apparel shops, the qualitative analysis approach seems to be the most suitable for this research.

Content analysis, which includes document analysis of books, articles, reports, or interviews, is the method chosen for data analysis. The goal of content analysis is to verbally summarize the document's substance. These are typically of a qualitative nature, but quantitative techniques can also be applied, for instance by counting the number of times a given phrase is used, as was done in this study to determine legitimacy (Tuomi and Sarajärvi, 2009). Documents contain three different aspects: settings, user, and creator (Prior, 2003). Users are similar to writers, publishers, agents, and other creators, while (Prior, 2003).

This study will concentrate on secondary data due to the nature of the research and the scarcity of primary sources. Secondary data is information that comes from a source other than the researcher, who is referred to here as the data collector. The data is gathered from a previously established source. The secondary data that the researcher employed in this study came from H&M annual reports, books, previous journals, or theses that were relevant to the topic at hand. This study uses One of the world's leading fast fashion companies, H&M is a global Swedish apparel

brand that has made a commitment to becoming fully sustainable by the year 2030. This study will be conducted over a period of 10 years (2011-2020). This research was done using information from H&M's annual report.

Content analysis will be carried out according to these steps:

1. Data preparation
2. Determine the unit or theme of analysis
3. Develop coding categories and schemes
4. Pre-testing the coding scheme on the sample
5. Encoding all text
6. Assess the coding consistency used
7. Draw inference based on encoding or theme
8. Presentation of results

Findings

According to Shen, Mukherjee, and Pattanayak (2011), who are cited in the methodology, 15 themes will be investigated in this study. These themes demonstrate the amount of environmental disclosure in the company's reports. As can be seen, information on environmental standard compliance has been reported in a maximum of 198 sentences. It also provides enough in-depth information about "environmental policies or company concern for the environment" in its 75 sentences. Additional topics covered include "conservation of natural resources," "acceptance of environmentally friendly technologies," "awards for environmental preservation," and "training/education for environmental protection."

The findings also indicate that, of the 3,563 phrases in total that H&M disclosed, all of the disclosure is of a qualitative nature. Additionally, there are no negative news stories among the 3,563 good news stories listed in the environmental disclosure. While some supplementary information can also be obtained in articles, the majority of the information is taken from sustainability reports.

Table 1. Environmental disclosure for H&M Group

No.	Themes	Volume of Disclosure	Type of News
1.	Compliance with environmental standards	237	Positive
2.	Information relating to environmental costs and liabilities	-	-
3.	Future estimates related to environmental costs	-	-
4.	Legal proceedings for violating environmental laws	-	-
5.	Environmental policies or company concern for the environment	569	Positive
6.	Conservation of natural resources	335	Positive
7.	Air emission information	343	-
8.	Water discharge information	932	Positive
9.	Solid disposal information	461	Positive
10.	Land rehabilitation and remediation	-	-
11.	Noise emission information	-	-
12.	Information on spills	-	-
13.	Adoption of environment friendly technology	92	Positive
14.	Awards for environment protection	32	Positive
15.	Training/education for environment protection	562	Positive
Total		3,563	Positive (3,563)

There is no precise criterion to reflect whatever environmental norm underlies H&M's sustainability reports, according to those reports' findings. They do, however, have a few aspects that show their compliance. Three sections of H&M's sustainability report covering the years 2011 through 2015 address the company's environmental objectives, plans, and accomplishments. Be Climate Smart, Reduce, Reuse, Recycle, and Use Natural Resources Responsibly are the three subheadings of this section. Although these sections' names changed from 2016 to 2018, their contents remained the same. The chapter on 100 percent Circular & Renewable contains the relevant information. While the moniker is Circular & Climate Positive for the remaining two years, 2019 and 2020.

A corporation should follow the Plan-Do-Check-Act (PDCA) cycle in accordance with ISO 14000, which addresses environmental management. Starting with setting up their environmental objectives, goals, and targets (which should ideally be quantifiable), the company then assists in creating control and management procedures and processes and serves to draw attention to any pertinent legal requirements that can later be incorporated into the policy. The business must apply the procedures after planning, verify the processes, and report the results. The evaluation of the results will be the fundamental for the company to take actions in order to improve their performance. H&M has been doing it, they have their own PDCA cycle and always report the results in the sustainability report. Not only the results, they also disclose their long-term goals for certain points like CO₂ emission, electricity usage, garment-collecting initiative, rain water harvesting, water usage, waste management, contribution to climate change, etc. They also disclose the lessons they have learnt from putting their environmental policy into practice. Given their high level of transparency, H&M has won the Fashion Transparency Index three times in the past ten years (2017, 2019 and 2020). With a score of 73 percent in 2020 and 61 percent in 2019, H&M was placed first among 250 fashion brands in Fashion Revolution's 2020 Fashion Transparency Index. No information was provided regarding the score in 2017.

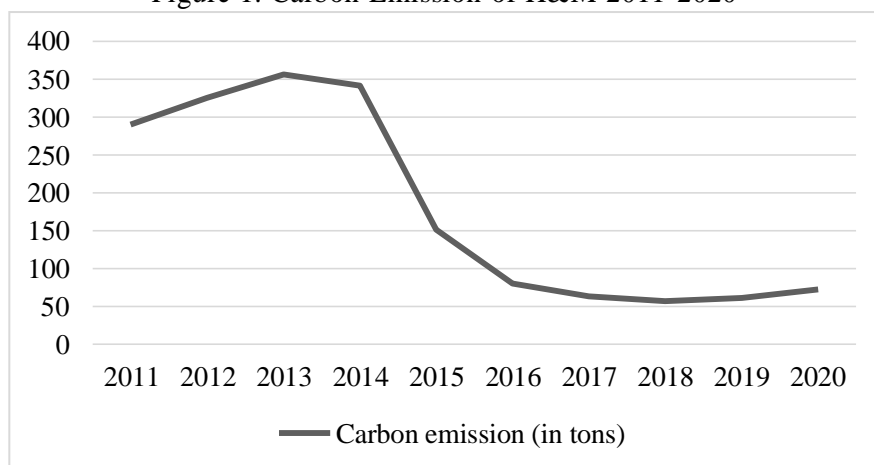
H&M doesn't have any records of breaking environmental regulations between 2011 and 2020. It indicates that H&M has been following environmental standards for the last ten years, which is not surprising given that H&M has always aimed to be sustainable. In 2011, H&M and Greenpeace collaborated on their shared goal of ending the use of dangerous chemicals and achieving zero discharge of these substances throughout the production of textiles worldwide. Using a strategy based on the precautionary principle, H&M has been trying to decrease the usage and effects of hazardous chemicals since 1995. H&M is a major player in the sector with the power and capacity to promote change because to its size and well-regarded approach to chemicals management. In order to lead their industry and set a new standard for environmental performance, H&M, the adidas Group, C&A, Li Ning, NIKE, Inc., and Puma created a unified roadmap and ambitious action plan in 2011. The goal was to achieve zero discharges of those chemicals by 2020. In order to find potential water-based substitutes, H&M started collaborating with chemical producers, makers of adhesives, and suppliers of accessories, bags, and shoes in 2009. Trials revealed that it was possible to cut the level of volatile organic compounds (VOCs) by 65%. In 2011, these water-based adhesives were used to make all of H&M's bags. This method also resulted in 450,000 pairs being generated in 2010. H&M has grown this by more than 400% to more than 2.4 million pairs by the end of 2011.

LED lights save up to 75% of energy use compared to neon lights. In 2011 H&M have made a requirement to use LED lights for logo signs in all newly built stores. They estimate that this shift during 2011 alone has made possible reduction of about 470 tons CO₂ emission which is equivalent to the emissions caused by the electricity use of about 60 households in one year. In 2020, H&M reached a 17% reduction in electricity consumption per square metre and opening hour. This was partly as a result of the impact of COVID-19 on their stores. They continued retrofitting LED lighting, updating 288 stores in 28 markets. In 2020, 90% of electricity purchased for H&M's operations was renewable (96% in 2019).

H&M initiated a clothing collection effort in 2013 and put a special emphasis on recycling programs for clothing across all markets. We have collected thousands of tons of clothing since we started our project in 2013 to give them new lives. They only collected 12,341 tons in 2015, which is more than 61 million t-shirts. Everything has been taken care of. There is no waste. Currently, the majority of fibers are recycled or utilized to manufacture fresh yarn for clothing, cleaning cloths, or secondhand clothing, among other uses. H&M and Danone AQUA worked together on a Bottle2Fashion project in Indonesia in 2017. Through this collaboration, Danone collects and recycles plastic waste which is then sent to H&M suppliers where it is turned into recycled polyester, made into products and sold in H&M stores.

In 2011, H&M achieved the target for a 5% reduction in emissions through offsetting. CO₂-e emissions per million SEK sales were 3.16 tons. The reduction was achieved through reducing the transportation of goods via air by 32%, through improved energy efficiency in their stores and by offsetting using Gold Standard verified carbon reduction projects. In 2014, carbon efficiency improved by 16% and total emissions decreased by 4% (H&M, 73:2014).

Figure 1. Carbon Emission of H&M 2011-2020



Source: H&M Sustainability Reports

Compared to 2015, H&M's emissions were significantly decreased in 2016 by 47%. H&M further decreased operational emissions by 21% in 2017. In 2020, H&M's operations' net emissions climbed by 18%. 17,387 kilotons of carbon dioxide equivalent (CO₂-e) emissions were produced overall (1.6 percent decrease compared to 2019). Over a period of months, the COVID-19 epidemic resulted in store closings as well as decreased orders and production, which reduced emissions from these sources. The increase resulted from the new RE100 market boundary requirements being aligned with the procurement of renewable energy, which reduced the proportion of renewable energy and increased emissions.

In 2012 and 2013, 92% of the waste handled in the distributions centers was recycled. The use of recycled polyester is equivalent to 7.9 million PET bottles in 2012 and 9.5 million PET bottles in 2013. H&M is the second largest user of recycled polyester in the world. The majority of the waste that they generate is handled in their warehouses. In 2015, the waste was around 50,000 tons (2014: 46,000t, 2013: 35,000t) and consisted mainly of cardboard (65%), paper (10%) and plastic (7%). In 2015, the recycled waste was 94% (2014: 91%, 2013: 92%).

More than 22,000 tons of clothing have been collected by H&M since the campaign to collect them began in 2013 in order to give them new lives. They only collected 12,341 tons in 2015, which is more than 61 million t-shirts. Everything has been taken care of. There is no waste. Currently, the majority of fibers are recycled or utilized to manufacture fresh yarn for clothing, cleaning cloths, or secondhand clothing, among other uses. Their present waste management strategy focuses on two categories: garbage from stores and warehouses and waste from faulty items. They always strive to reuse or recycle both forms of garbage with 0% going to landfill in

order to verify that they are actually operating in a circular manner. When they produce something that cannot be sold because it is harmful to use, it is a rare event. These products could include those that have failed specific chemical safety testing or were contaminated with mold while in transit. Products that are harmful cannot be recycled and, depending on how unsafe they are, may not even be able to be reused. The only alternative in these situations is to destroy these dangerous things. Within the stores and warehouses, they are focusing our efforts on managing the most common types of waste – cardboard, plastic and paper. In most cases, these materials are collected in the stores and then sent to the local warehouse facilities where they can be recycled.

Environmental disclosure has an impact on sustainability since it shows a corporation has upheld its environmental responsibility. The company pledges to improve performance sustainability. They uphold their seven commitments, which are to strengthen communities, choose and recognize ethical partners, provide clothing for socially conscious consumers, be ethical, be climate savvy, reduce, reuse, and recycle.

Table 2. Value Chain Impacts

Value Chain	Climate Impact	Water Impact
Design	Medium	Low
Raw Materials	Medium	High
Fabric and Yarn Production	High	High
Product Manufacturing	High	High
Transport	Low	Low
Sales	Low	Low
Use	Medium	Medium

Source : H&M Sustainability Reports

According to H&M's sustainability report from 2020, the value chain's effects on the climate and water are quite high while the opposite is true for the water impact. Climate impact refers to greenhouse gas emissions in each stage of their value chain, taking into account the type and quantity of energy consumed as well as any potential for emission reductions as they work toward their climate-positive objective. The term "water impacts" refers to the effects of the water we use and discharge in each step of their value chain, taking into consideration the quantity and sources of water, the quality of the water, and the prospects for recycling.

In order to be a fair and egalitarian corporation while promoting circular and climate-friendly fashion, H&M has sustainability. Governance for sustainability is also present. Sustainability is the primary responsibility of more than 230 employees at H&M, and as they incorporate sustainability into their broader company objectives and agenda, it is starting to affect everyone's job.

Conclusion

The goal of this study is to understand how environmental disclosure affects a company's sustainability. Sen, Mukherjee, and Pattanayak are cited in this study's analysis of environmental disclosure (2011). The level and type of disclosure in H&M have been evaluated using a content analysis. using a few criteria that were established in the form of environmental themes. According to the study, different environmental themes have varying levels of environmental transparency. However, H&M is very open about their environmental disclosure; they have complied with 60% of the themes, while the remaining 40% have no disclosure.

With a variety of strategies, H&M is working toward becoming a sustainable and circular business. In addition to outlining their policies, they also discuss how they deal with environmental issues, more sustainable growth methods, implementation, and evaluation. Additionally, they outline the objectives for each aspect of the report.

Environmental disclosure has an impact on sustainability since it shows a corporation has upheld its environmental responsibility. The company pledges to improve performance

sustainability. The environment and water are both impacted by the value chain of H&M, with the latter having a medium-high impact on both. Climate impact refers to greenhouse gas emissions in each stage of their value chain, taking into account the type and quantity of energy consumed as well as any potential for emission reductions as they work toward their climate-positive objective.

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Political Connections in Accounting Research: A Recent Literature Review

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Abstract: The issue of political connections became an interesting topic to be discussed. There have been many empirical studies conducted on political connections from the point of view of financial management. This paper tried to examine 17 research articles on political connections from an accounting point of view published in accounting journals during 2015 – 2021. Accounting research discusses political connections from various perspectives such as auditing, financial disclosure, firm value, stock market, and debt. Another interesting finding is the existence of research that discusses the effect of political connections on the ruling government. The countries that became the research settings are China and the USA, followed by Malaysia, Bangladesh, and Indonesia. The result of this review is the researcher's new perspective on political connections, especially from the aspect of the ruling party and not only from the company.

Keywords: political connection, financial disclosure, firm value, auditing, firm performance

Introduction

Research on political connections has been carried out by many researchers using various country settings. Political connections became an interesting issue. It involves many aspects because it was not only testing the connectivity between the company and the ruling government but also the effect obtained from the connection. Political connection research has been spreading in various fields such as accounting, management, and finance, using several variables and state settings as research objects.

The initial study of Political Connections was initiated by (Fisman, 2001), who stated that a company is declared to have political connections if the company has relationships with family members or friends of the president. (Faccio, 2006) explained that a company can be said as politically connected if one of the majority shareholders (a person who directly or indirectly controls 10% of the voting rights) or a member of the board of directors is the head of state, minister, or member of parliament, or someone who has ties to the close to politicians. The political connection could be interpreted as a condition when the officials, which could be the board and or other top management members of the company or also controlling shareholders and or company block shareholders, have positions or are close to parties who are actively involved in the government (Chaney et al. al., 2011). The definition of political connections then developed into several new definitions like state-owned companies and their boards of directors politically connected to officials (Wu et al., 2010) and social relations involving intrigue to gain power (Wong & Hooy, 2018).

The increasing interest in political connection research requires a literature review that will make it easier to determine the new variables. Research development needs a variety of theoretical perspectives and methods to answer various research questions, the choice of theories, and research methods (Luft & Shields, 2003). The research study that we will examine here focuses on researching political connections from an accounting point of view. We used 18 articles discussing

political connections and published them in accounting journals. The political connection discussion has been studied more from the financial management point of view. This study tries to use the accounting point of view.

Research Method

We review quantitative research on political connections published in reputable accounting journals. We use access from Emerald Insight, Scencedirect, Elsevier, Wiley Online Library, Taylor & Francis Online, University of Wallonggong, and Emerald. There are 17 articles that we found and can be read in accounting journals during 2015 – 2020. The results are as follows:

Table 1. Journal Literature Review List

Journal	Years of Publication	Amount
International Journal Of Accounting	2017	1
Journal of Accounting Research	2020	1
Journal of Public Budgeting, Accounting & Financial Management	2021	1
Accounting, Auditing & Accountability Journal	2018	1
The Accounting Review	2017	1
The British Accounting Review	2020	1
Accounting, Organization and Society	2015	1
Contemporary Accounting Research	2017	1
European Accounting Review	2020	1
Journal of Contemporary Accounting & Economics	2015	1
Journal of Contemporary Accounting & Economics	2019	1
Journal of Contemporary Accounting & Economics	2018	1
Journal of Accounting in Emerging Economies	2015	1
Asian Review of Accounting	2018	1
Journal Financial Reporting of Accounting	2020	1
Australasian Accounting, Business and Finance Journal	2017	1
China Journal of Accounting Studies	2015	1
Total		17

Journal search results show that research on political connections mostly appears in the Journal of Contemporary Accounting & Economics for three articles published in 2015, 2018, and 2019. Other journals contain 1 article. We check the validity of these journals using the Scimago journal and ensure that the journals are still published. The next step is to examine in detail the existing articles and then group them into several categories. Our results show that we have not found the topic of political connections in accounting journals published in 2016.

The articles that raise political connections have been classified according to several topics that become interesting issues in those political connections. The topics include earning management, tax avoidance, disclosure, auditing, cost of debt, and firm performance. The mapping results show the idea is: Firm Disclosure (Amara, I., & Khlif, 2020; Deboskey et al., 2018; Muttakin et al., 2018; Qian, W., & Chen, 2020). Four titles and Firm Performance (Giosi & Caiffa, 2021; Liang et al., 2015; Muttakin et al., 2015; Zhang & Truong, 2019) as many as four titles and Auditing (Ariningrum & Diyanty, 2017; Elemes et al., 2020; Wahab et al., 2015) and the remaining 1 article each for taxation (Lin et al., 2017), public sector accounting (Cuny et al., 2020), Debt (Bliss & Gul, 2012), Earning Management (Habib et al., 2017), Firm Value (Fung et al., 2015), and stock market (Christensen et al., 2017). The results are in Table 2 below.

Table 2. Accounting Research Category

Publication Year	Auditing	Taxation	Firm Disclosure	Firm Performance	Public Sector Accounting	Debt	Earning Management	Firm Value	Stock Market	Total
2015	1			2				1		4
2017	1	1				1	1		1	5
2018			2							2
2019				1						1
2020	1		2		1					4
2021				1						1
Total	3	1	4	4	1	1	1	1	1	17

The country settings where the research are conducted, generally developing countries and focus on only one country. Research on political connections tends to use only one country because manual data collection causes difficulties for cross-country (Trinugroho, 2017). But there is one researcher who combines several developing countries in Asia for analysis. China and the USA are still the most studied countries, followed by Malaysia, Bangladesh, and Indonesia.

The countries used in the political connection research are as follows:

Table 3. Country Settings and Topics in Political Connection Research

Negara	Auditing	Taxation	Firm Disclosure	Firm Performance	Public Sector Accounting	Debt	Earning Management	Firm Value	Stock Market	Total
Bangladesh			1	1						2
China		1	1	2						4
Asian Emerging Countries			1							1
Indonesia	1						1			2
Italia				1						1
Malaysia	1					1		1		3
USA	1		1		1				1	4

Results and Discussion

The results show the theories used in some political connection research as if the agency theory is commonly used in some research that discusses the effects of political connections on auditor determination, auditor independence, and audit fees. Researchers use signaling theory when they investigate the effects of political connections on firm performance and stock performance, while others use neo-pluralist theory, legitimacy theory, and stakeholder theory to discuss the disclosure effect on politically connected companies. Resource dependence theory is used to examine the practice of earning management in politically connected companies. For firm value, some researchers use the theory of the firm and signaling theory, while for the effect of political connections to the government, researchers use stewardship theory.

Research articles on political connections make political connections an independent variable that will affect the dependent variable. The focus of the research is on politically connected companies and the effects of these connections on companies. The effects can be positive or negative. For example, the political affinity between the board of directors and politicians can pose a significant challenge to the effective enforcement of tax compliance in a politically controlled economy (Lin et al., 2017). The effect for the government that has corporate political connections is a weakening in optimizing the government's social role so that it has an impact on decreasing the electability of officials at the time of election by the community (Cuny et al., 2020). Some other effects are loans with lower interest rates for politically connected companies in Hong Kong compared to those that are not (Bliss et al., 2018). Loans made by politically connected companies

encourage companies to tunnel and ultimately encourage management to manage their profits to cover loans with related parties (Habib et al., 2017).

Auditing in political connections focuses more on auditor independence. The politically connected company's auditor independency will affect audit quality because of the political compromises between auditors and politically connected companies (Elemes et al., 2020). The independency Auditor, proxied with non-audit fees and audit fees becomes the concern of researchers using the Malaysian setting. The results show a positive and significant relationship between non-audit fees and audit fees, and these weaken in politically connected companies that are dominated by Bumiputra (Wahab et al., 2015). For the Indonesian setting, an independency auditor is also a concern of researchers. Politically connected companies will have a higher inherent risk and they want higher audit quality from auditors, so this will have an impact on audit fees (Ariningrum & Diyanty, 2017).

Another interesting point is the disclosure by politically connected companies. Generally, disclosure by politically connected companies has a relationship with firm value (Amara, I., & Khlif, 2020). It's just that CSR disclosure of politically connected companies tends to be limited or not fully disclosed because this is a company's effort to avoid pressure from stakeholders related to the potential threat of legitimacy that comes from poor CSR performance (Muttakin et al., 2018). Disclosures by politically connected companies show a positive relationship and are more politically motivated. There has been a significant improvement in the quality of environmental disclosures and this increase is particularly pronounced in firms with politically connected directors. These implied that increased environmental disclosure is more related to greater political interest, the intervention of leadership change, and consolidation of power during anti-corruption campaigns than changes to regulations to reduce political shielding (Qian, W., & Chen, 2020). Disclosure of politically connected companies is more transparent if the proportion of female directors is higher (Deboskey et al., 2018).

This research on political connections is interesting when discussing the effect of political connections on company performance. The results of research in several articles show a positive effect of political connections on market capitalization related to individual political connections (Giosi & Caiffa, 2021). Moreover, politically connected family firms outperformed politically unconnected family firms. In contrast, non-family firms with political connections show lower firm performance than non-family firms without political connections (Muttakin et al., 2018). Another effect of this connection is a decrease in the value of the company due to politically connected directors. This condition is seen in companies in industries that are regulated and practice earnings management. However, the market responds favorably to directors who have political ties to the government and carry out significant business transactions (Zhang & Truong, 2019). These results support research (Liang et al., 2015) which shows that the higher the political rank of the company manager, the better the company's performance. The effect of political connections on company performance is also influenced by the duration of the connection between the company and the government in power. Firms with longer periods of political connections, perform better than those with short-term connections. Collectively, the evidence suggests that the length of political connections is an important factor in moderating economic value (Fung et al., 2015).

Political connections in accounting research also discuss the impact of political connections on stock prices. (Christensen et al., 2017) discusses this effect but in terms of the political connectivity of brokers. If brokers can obtain personal information through their political connections, then analysts at politically connected brokers should issue recommendations for more profitable stocks, and this increase in profitability should be more pronounced for politically sensitive stocks. In the end, brokers obtain value-relevant nonpublic information from their political connections.

The political connection can be defined as a close relationship between the company and those who hold power in the company's operational area. The results of a review of 17 articles

show how researchers measure the level of corporate political connections. In general, dummy variables are used to describe the relationship between politically connected companies and those that are not and this is still the central issue in most of these articles. In addition, most of the studies have an endogeneity problem. They used econometric techniques to overcome these problems.

Conclusion and Recommendation

This literature review uses 17 articles published in indexed accounting journals from 2015 to 2021. The country settings used in the research are mostly China and the USA, then Malaysia, Indonesia, Bangladesh, and Italy. Political connections in the study are used as independent variables that can influence other variables. The research topics of political connections in accounting are auditing, firm value, firm performance, disclosure, stock market, debt, taxation, and public sector accounting.

One alternative research method that has become more common in recent years is the literature review (Luft & Shields, 2003). This literature review study includes 61 previous empirical quantitative studies in the context of corporate political relations. Based on our analysis, corporate political connections are mostly carried out in developing countries because they provide a unique institutional setting. We also document that political connection is generally used as an independent variable because it is classified as one of the characteristics of a company that can affect various other company variables. In addition, topics related to political relations that are widely used by researchers are company performance, corporate action, and loans and special rights. Hopefully, this literature review can provide a useful overview not only for researchers interested in political connections but also for the business industry and regulators. This study can provide an overview of politically connected companies so that they can manage their political connections carefully to increase the company's potential. For the government in power, political connections can affect the electability of political parties, as well as candidates for office.

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ANALYSIS OF MEDICINES PRICING ON SALES VOLUME DURING PANDEMIC COVID-19 AT LOCAL PHARMACIES

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Abstract: This study aims to determine and analyse the determination of the selling price of medicinal products on sales volume. This research method is descriptive qualitative. Data collection techniques were carried out using observation, interviews and documentation. The results of this study found that the increase in the selling price of medicinal products and sales volume was not effective in increasing sales revenue at the UHO Education Pharmacy. The factors that hinder the increase in sales volume are mixed factors where there is an imbalance between the availability of supplies of personal protective equipment and medicines in pharmacies and the needs for buyers.

Keywords: Selling Price, Sales Volume, Pandemic era.

Introduction

The general economic condition of the community has changed due to the presence of a virus originating from the city of Wuhan, Hubei province in China, the World Health Organization has named a new virus called severe acute respiratory syndrome. coronavirus-2(SARS-CoV-2) and the name of the disease coronavirus2019 (COVID-19). Initially, this disease was temporarily named as 2019 novel coronavirus (2019-nCoV), then WHO announced a new name on 11 February 2020, namely Coronavirus Disease (COVID-19) caused by a virus Severe Acute Respiratory Syndrome Coronavirus-2(SARS-CoV-2)(WHO, 2020). The first COVID-19 was reported in Indonesia on March 2, 2020 in two cases (Susilo et al., 2020). Based on data on the distribution of the Indonesian COVID-19 Task Force on October 8, 2020, there were 320,564 positive cases, 244,060 recovered, and 11,580 deaths (COVID-19 Handling Task Force, 2020).

The province of Southeast Sulawesi confirmed their first three positive cases of COVID-19 on the evening of Thursday 19 March 2020. One male patient was 41 years old, and two women were 32 years old and 25 years old, respectively. The Governor of Southeast Sulawesi Provinc Ali Mazi said three patients in Southeast Sulawesi who tested positive for the coronavirus (COVID-19) had a history of traveling from Umrah (Alsair, 2020). COVID-19 poses a tremendous challenge to occupational health. Without a doubt, health workers deserve national attention today. Health workers are at higher risk of exposure because of their close contact with COVID-19 patients, which puts them at risk of infection. At the same time, they themselves are an important source of disease transmission to patients, friends, and family. (Burdorf et al., 2020).

The Covid-19 pandemic has had a positive impact on the pharmaceutical industry. In general, the need for vitamins, immune-boosting supplements, herbal medicines, hand sanitizers, and masks has increased so that the pharmaceutical industry that plays in this sector gains considerable growth. The pharmaceutical and medical device industry sector is in the category of experiencing high demand during the pandemic when other sectors are experiencing heavy impacts. The Ministry of Industry noted that in the first quarter of 2020, the chemical, pharmaceutical and traditional medicine industries grew positively by 5.59 percent. In addition, the chemical and pharmaceutical industries are also the manufacturing sector that deposited a

significant investment value in the first quarter of 2020, reaching Rp 9.83 trillion. For projections, the pharmaceutical industry must have been able to adapt to the pandemic situation. On the other hand, the pandemic has also made pharmacy services in the country face various challenges. Most of the national pharmaceutical raw materials are imported, both from China and India. As a result, when the pandemic hit the world and resulted in the two countries supplying raw materials having to close their access (lockdown), the supply of national pharmaceutical raw materials was hampered which caused a scarcity and prices for medicines, medical devices, personal protective equipment (PPE) had soared. This is due to the increasing demand for medicines, medical devices, Personal Protective Equipment (PPE) such as vitamins, immune-boosting supplements, herbal medicines, hand sanitizers, and masks.

Pharmacy Education Halu Oleo University (UHO) is a trading company engaged in the sale of drugs and pharmaceuticals. During the current pandemic, in an effort to increase profits, UHO Education Pharmacies tend to experience problems such as the availability of merchandise which is in scarcity due to the high level of demand, resulting in an increase in the selling price of drugs by Pharmaceutical Large Companies (PBF). The following are the price changes set by the UHO Education Pharmacy during the COVID-19 pandemic:

Table. 1
Changes in Drug Prices at UHO Education Pharmacies When They Occur COVID-19-Now

Product name	Price	
	2019	After March Year 2020 - Now
Mask/box	Rp. 60,000	Rp. 150,000
<i>hand sanitizer</i>	Rp. 5,000-10,000	Rp. 15,000
Enervon C (strip)	Rp. 5,000	Rp. 5,500
Imboost	Rp. 40,000	Rp. 45,000

Source: UHO Education Pharmacy 2019-2020

From the data above, it can be seen that almost all medicinal products experienced a significant price increase such as masks and tablets hand sanitizer. This is due to the increasing level of demand for medicines, medical devices, Personal Protective Equipment (PPE) as a form of public self-prevention from the spread of the COVID-19 virus.

Prices in an industry greatly affect the volume of sales. Entrepreneurs need to think about the right selling price because an incorrect price will result in not attracting buyers to buy or use the service, setting the right selling price does not always mean that the price must be set as low or as low as possible. Because many consumers who consider the price in using a product offered. The current industry varies according to the dynamics that occur in other industrial sectors, such as factory and home industries which have increasingly promising prospects (Iman, 2016).

Problem formulation How is the selling price of medicinal products determined on sales volume during the Covid-19 pandemic at the UHO Education Pharmacy? This study aims to determine and analyse the determination of the selling price of medicinal products on the sales volume during the Covid-19 pandemic at the UHO Education Pharmacy.

Literature Review

Sales Volume

According to Basu Swastha, sales is interactions between individuals meeting each other aimed at creating, improving, controlling or maintaining exchange relationships so that they are beneficial to other parties. Sales can also be interpreted as an effort made by humans to deliver goods to those who need it in exchange for money according to a predetermined price by mutual agreement.

Sales volume is the final result achieved by the company from the sale of products produced by the company. Sales volume does not separate in cash or credit but is calculated as a whole from the total achieved. If sales volume increases and distribution costs decrease, the company's profit achievement will also decrease. According to Kotler, sales volume is goods sold in the form of money for a certain period of time and in it has a good service strategy.

Cost of goods sold

According to Muh Syahrul (2016) the cost of goods sold is the price of goods sold. Determination of the cost of goods sold in industrial companies, in general, the beginning inventory of finished products is added to the total production price (cost of goods) and reduced by the ending inventory of the product, so this understanding of the cost of goods sold, based on Indonesian accounting principles, explains that the beginning balance of inventory plus the cost of goods purchased for sale minus the total ending inventory is the cost of goods that must be compared with income for the period in question, for industrial companies in the cost of goods sold including all direct new wages and material costs plus all factory costs (production) is not directly corrected by the amounts of the beginning and ending inventory balances.

COVID-19

Corona viruses are a large family of viruses that cause illness ranging from mild to severe symptoms. There are at least two types of coronaviruses that are known to cause illness that can cause severe symptoms such as: Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronavirus Disease 2019 (COVID-19) is a new type of disease that has never been previously identified in humans. The virus that causes COVID-19 is called Sars-CoV-2. Corona virus is zoonotic (transmitted between animals and humans). Research says that SARS was transmitted from civet cats (civet cats) to humans and MERS from camels to humans. Meanwhile, the animal that is the source of the transmission of COVID-19 is still unknown (Ministry of Health, 2020).

NO.	Author	Title	Similarity	Diff	Results
1.	Bintang Komara and Ade Sudarma (2016)	Analyses of COGS using Full Costing method as cost pricing at CV Salwa Meubel	Research Method descriptive Qualitative approach Variable independent: Selling Price	Different Research Object	COGM not effect to selling price due to other variable order cost and level of expected margin.
2.	Khairul Rakhmat Gunawan (2020)	The effect of Covid 19 Face Mask Sales and Hand Sanitizer in Sumenep Municipality	Research Method descriptive Qualitative approach Variable dependent: Covid effect to Sales	Different Research Object	Cloth type masks with picture motifs in Kec. Batuan Sumenep has a positive response to consumers, this is indicated by several interviews with sellers of masks and hand sanitizers. With the behavior of the residents of Kec. These rocks they buy masks and hand sanitizers because they are afraid of getting infected. While the hand sanitizer that is in demand with 40% alcohol content

Research Method

The general economic condition of the community has changed due to the presence of a virus originating from the city of Wuhan, Hubei province in China, the World Health Organization has named a new virus called severe acute respiratory syndrome. coronavirus-2(SARS-CoV-2) and the name of the disease coronavirus2019 (COVID-19). Initially, this disease was temporarily named as 2019 novel coronavirus (2019-nCoV), then WHO announced a new name on 11 February 2020, namely Coronavirus Disease (COVID-19) caused by a virus Severe Acute Respiratory Syndrome Coronavirus-2(SARS-CoV-2)(WHO, 2020). The first COVID-19 was reported in Indonesia on March 2, 2020 in two cases (Susilo et al., 2020). Based on data on the distribution of the Indonesian COVID-19 Task Force on October 8, 2020, there were 320,564 positive cases, 244,060 recovered, and 11,580 deaths (COVID-19 Handling Task Force, 2020).

The province of Southeast Sulawesi confirmed their first three positive cases of COVID-19 on the evening of Thursday 19 March 2020. One male patient was 41 years old, and two women were 32 years old and 25 years old, respectively. The Governor of Southeast Sulawesi Province, Ali Mazi said three patients in Southeast Sulawesi who tested positive for the corona virus (COVID-19) had a history of traveling from Umrah (Alsair, 2020). COVID-19 poses a tremendous challenge to occupational health. Without a doubt, health workers deserve national attention today. Health workers are at higher risk of exposure because of their close contact with COVID-19 patients, which puts them at risk of infection. At the same time, they themselves are an important source of disease transmission to patients, friends, and family. (Burdorf et al., 2020).

The Covid-19 pandemic has had a positive impact on the pharmaceutical industry. In general, the need for vitamins, immune-boosting supplements, herbal medicines, hand sanitizers,

and masks has increased so that the pharmaceutical industry that plays in this sector gains considerable growth. The pharmaceutical and medical device industry sector is in the category of experiencing high demand during the pandemic when other sectors are experiencing heavy impacts. The Ministry of Industry noted that in the first quarter of 2020, the chemical, pharmaceutical and traditional medicine industries grew positively by 5.59 percent. In addition, the chemical and pharmaceutical industries are also the manufacturing sector that deposited a significant investment value in the first quarter of 2020, reaching Rp 9.83 trillion. For projections, the pharmaceutical industry must have been able to adapt to the pandemic situation. On the other hand, the pandemic has also made pharmacy services in the country face various challenges. Most of the national pharmaceutical raw materials are imported, both from China and India. As a result, when the pandemic hit the world and resulted in the two countries supplying raw materials having to close their access (lockdown), the supply of national pharmaceutical raw materials was hampered which caused a scarcity and prices for medicines, medical devices, personal protective equipment (PPE) had soared. This is due to the increasing demand for medicines, medical devices, personal protective equipment (PPE) such as vitamins, immune-boosting supplements, herbal medicines, hand sanitizers, and masks.

Pharmacy Education Halu Oleo University (UHO) is a trading company engaged in the sale of drugs and pharmaceuticals. During the current pandemic, in an effort to increase profits, UHO Education Pharmacies tend to experience problems such as the availability of merchandise which is in scarcity due to the high level of demand, resulting in an increase in the selling price of drugs by Pharmaceutical Large Companies (PBF).

Findings

Description of Operational Activities of UHO Education Pharmacy

UHO Education dispensary activities include drug management activities and drug services, where drug management is a cycle of activities starting from planning, procurement, receipt, storage, destruction, control, and recording.

- Planning at the UHO Education Pharmacy is carried out based on the needs of consumers at the pharmacy. Consumer needs are seen from the amount of drug expenditure and drug supply. Order planning is done by considering the number of drugs that have run out or their stock is running low. Medicines and medical devices that have run out or are out of stock are recorded in an empty medicine book or defect book.
- The procurement of pharmaceutical preparations is carried out by the Responsible Pharmacist through a Letter of Order (SP). The form of procurement of goods at the UHO Education Pharmacy is carried out by direct purchase to PBF.
- Receipt of incoming goods at the UHO Education Pharmacy will be received by Pharmacy officers. Receipt of goods can be carried out by pharmacists who have a Pharmaceutical Technical Work Permit (SIKTTK), except for psychotropic drugs whose signatures on receipt and receipt of drugs must be carried out directly by pharmacists.
- Storage of pharmaceutical supplies at the UHO Education Pharmacy is arranged based on the therapeutic class, dosage form, storage temperature of the drug and alphabetically. Drugs with special storage temperatures, such as suppositories and ovule preparations, are stored in a refrigerator with a pre-adjusted temperature.
- The destruction of pharmaceutical preparations can be done by planting, burning or other methods that are determined and reported in the minutes of destruction of the Education Pharmacy. UHO has never destroyed drugs, so that what is studied is only a theory related to drug destruction.

- The recording of prescriptions and pharmaceutical supplies at the UHO Education Pharmacy, takes place with the recording method, where every entry and exit is recorded every day in the sales and incoming goods book. Orders and invoices for goods received from each PBF are collected and archived in a filing cabinet. Meanwhile, financial management is carried out regularly and efficiently so that any receivables and debts of the pharmacy can be settled on time.

Determination of Drug Selling Prices at UHO Education Pharmacies

The process of determining selling prices at UHO educational pharmacies is carried out through several stages, from the data obtained and the results of interviews with assistant pharmacists. The main method that is usually applied in selling drugs so as not to lose is to look for the selling price of the pharmacy or what is commonly called HJA. The selling price of drugs for pharmacies is calculated by considering the net price, 10% VAT, and the desired profit margin. Or it could be another way, namely calculating the net price with a direct profit margin. Here's the calculation:

$$\text{HJA} = \text{HNA} + 10\% \text{ VAT} + \text{Profit Margin}$$

Where :

1. HNA is the Net Pharmacy Price, which is the initial price (capital) of the pharmacy in buying drugs from distributors (PBF or PBF branches).
2. The mark-up set by the UHO Education Pharmacy is 20%, some set 25% and some set 30%. The profit margin is the desired profit. This can be determined by PSA as the owner of the pharmacy. The margin used at the UHO Education Pharmacy is 20%.
3. 10% VAT is a value added tax imposed for each value added from the transaction process from producer to consumer.
4. HJA is the Pharmacy Selling Price, the price offered to consumers after calculating HNA, 10% VAT and Mark-up. However, for drugs that must be prepared by the pharmacist first, the HJA will be added with a compounding service. The way to calculate the selling price of prescription drugs is as follows:

$$\text{HJA} = \text{Net Price} + \text{Profit Margin} + \text{Service Per Recipe}$$

Table. 2
 UHO Education Pharmacy Sales Price Calculation

Name of goods	No. Batch	Quantum	Price Unit	Sub-Total	Piece		Amount (Rp)
					%	score	
Paracetamol 500 grams	-	20 boxes	32,900	658,000	-	-	658,000
Tax base							658,000
VAT 10%							65,800
Amount that should be paid							723,800

HNA = Rp. 32,900 /box , Rp. 329, /tablet
 HJA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 329 + (Rp. 329 x 10/100) + Profit 20%
 = Rp. 329 + Rp. 32,9 + Profit 20%
 = Rp. 361.9 + (Rp. 361,9 x 20/100)
 = Rp. 361.9 + Rp. 72.38
 = Rp. 434.28,-/ tab
 = Rp. 4,400,-/ strip
 = Rp. 44,000,-/ box

Research analysis shows that the determination of the selling price of UHO educational pharmacies is calculated based on the price of PBF (Big Pharmacy Company) or the invoice price plus VAT (if subject to VAT) then added to the profit set by the pharmacy. Some pharmacies add operational costs that include depreciation costs, inventory maintenance costs and employee payroll, transportation or distribution costs. If there is a discount from PBF, the selling price of the pharmacy can be reduced. These components affect the selling price of the pharmacy. Similarly, market demand also affects the selling price of drugs in pharmacies. The biggest component that affects the selling price of drugs in pharmacies is the amount of margin or profit set by the pharmacy provider.

Determination of Drug Selling Prices at UHO Education Pharmacies During the COVID-19 Pandemic

The COVID-19 pandemic has not hampered drug production and shipments in the first quarter of 2020, although in the months that followed chemical shipments began to slow and stockpiles began to dwindle. The following is an example of a change in the pricing of several medicinal products and personal protective equipment at the UHO Education Pharmacy before and during the Covid-19 prevention and control conditions. The calculations are presented as follows:

Before the Covid-19 Pandemic:

- 1) Imboost = 77.500,- / box
- 2) Enervon C = 96.935,- / box
- 3) Face Mask = 20.350,- / box

Selling Price Calculation:

- 1) Imboost = Rp. 77.500 /box
 HNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 77.500+ (Rp. 77.500 x 10/100) + Profit 20%
 HJA = Rp. 77.500+ Rp. 7.750 + Profit 20%
 = Rp. 85.250 + (Rp. 85.250 x 20/100)
 = Rp. 85.250 + Rp. 17.050,
 = Rp. 102.300,-/ box
- 2) Face Mask = Rp. 20.350 /box
 HNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 20.350 + (Rp. 20.350 x 10/100) + Profit 20%
 HJA = Rp. 20.350 + Rp. 2.035 + Profit 20%
 = Rp. 22.385 + (Rp. 22.385 x 20/100)
 = Rp. 22.385 + Rp. 4.477
 = Rp. 26.826,-/ box
- 3) Enervon C = Rp. 96.935/box
 HNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 96.935+ (Rp. 96.935 x 10/100) + Profit 20%
 HJA = Rp. 96.935+ Rp. 9.694 + Profit 20%
 = Rp. 106.629 + (Rp. 106.629 x 20/100)
 = Rp. 106.629 + Rp. 21.326
 = Rp. 127.955,-/ box

Covid-19 Pandemic Period

Distributor's Initial Net Price:

- 1) Imboost = 170.500,- / box
- 2) Enervon C = 109.835,- / box
- 3) Face Mask = 85.000,- / box

Selling Price Calculation:

- 1) Imboost = Rp. 170.500 /box
 HNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 170.500 + (Rp. 170.500 x 10/100) + Profit 20%
 HJA = Rp. 170.500+ Rp. 17.050 + Profit 20%
 = Rp. 187.550 + (Rp. 187.550 x 20/100)
 = Rp. 187.550 + Rp. 37.510
 = Rp. 225.060,-/ box
- 2) Face Mask = Rp. 20.350 /box
 HNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 20.350 + (Rp. 20.350 x 10/100) + Profit 20%
 HJA = Rp. 20.350 + Rp. 2.035 + Profit 20%
 = Rp. 22.385 + (Rp. 22.385 x 20/100)
 = Rp. 22.385 + Rp. 4.477
 = Rp. 26.826,-/ box

- 3) Enervon = Rp. 85.000 / box
 CHNA = HNA + PPN 10% + Profit 20%
 HJA = Rp. 85.000 + (Rp. 85.000 x 10/100) + Profit 20%
 HJA = Rp. 85.000 + Rp. 8.500 + Profit 20%
 = Rp. 93.500 + (Rp. 93.500 x 20/100)
 = Rp. 93.500 + Rp. 18.700
 = Rp. 112.200,-/ box

Based on the calculations above, it can be seen that there was an increase in the selling price of several products needed during the Covid-19 pandemic, such as masks, where before the pandemic the selling price was Rp. 26,826 / box, increased to Rp. 112,200 / box. In addition, Multivitamin products that are in high demand during the Pandemic have also increased, including Imboost and Enervon C, which before the pandemic were sold at a price of Rp. 102,300 and Rp.127,955 / box, now increased to Rp. 225,060 and Rp. 144,983 / box. The price increase was caused by an increase in the purchase price or the initial net price set by the distributor or PBF.

Determination of Drug Selling Prices on Sales Volume at UHO Education Pharmacies Before and During COVID-19 Prevention and Control Conditions

The success of determining the selling price of the UHO Education Pharmacy on the level of sales volume can be seen from the sales data, while the UHO Education Pharmacy Annual sales data before and during the Covid-19 prevention and control conditions are presented in the following table:

Table. 3

Table of Sales Data for the Year 2019-2020

No	MONTH	2019	2020
		1	January
2	February	20,539,800	24,686,300
3	March	23,317,600	39,326,000
4	April	30,317,600	10,024,000
5	May	27,506,600	10,219,500
6	June	17,449,540	11,015,000
7	July	31,063,450	19,782,500
8	August	26,730,650	21,371,500
9	September	26,711,728	17,985,500
10	October	29,108,000	21,012,000
11	November	45,999,000	17,402,000
12	December	38,876,300	17,574,500
	TOTAL	333,434,068	245,228,400

Source: Primary Data processed in 2021

The data above shows that sales at the UHO Education Pharmacy before the entry of the Covid-19 Pandemic experienced fluctuations or fluctuating conditions, where the lowest sales occurred in January of Rp. 15,813,800. While the highest sales occurred in November with sales of Rp. 45,999,000, the Assistant Pharmacist explained that the increase in November was due to the widespread news of the spread of Covid-19 overseas that would enter Indonesia so that The demand for drugs and personal protective equipment from the Covid-19 virus is starting to increase.

Next, we compare it with sales data for 2020 where Covid-19 has started to enter Indonesia, precisely in March. Where the data above shows that the total sales at the UHO Education Pharmacy in 2020 decreased from 2019. However, it can be seen that the highest sales occurred in January-March which was the beginning of the entry of the spread of Covid-19 in Indonesia. The factor of increasing demand is the main factor that causes increased sales in January-March. The peak occurred in March where sales increased by Rp. 39,326,000, when Indonesia first confirmed cases of Covid-19 on Monday 2 March. At that time, President Joko Widodo announced that two Indonesians had tested positive for the Corona virus, namely a 31-year-old woman and a 64-year-old mother. The news resulted in people starting to experience Panic Buying or the condition of people buying goods in excess or buying goods out of panic by competing to buy and stock up on drugs and personal protective equipment from Covid-19 at their respective homes.

In April-December the sales level of the UHO Education Pharmacy decreased, one of the reasons being a mixed factor where there was an imbalance between the availability of personal protective equipment and medicines in pharmacies and the need for buyers. When production sites increase the availability of Covid-19 medicines and personal protective equipment, this results in the supply of products at pharmacies to increase and demand to fall. So that the demand for Covid-19 medicines and personal protective equipment such as masks for buyers is fulfilled. Meanwhile, masks are one of the personal protective equipment to avoid Covid-2019. Especially at this time of Covid-2019, buyers are competing to provide a stock of masks in their respective homes. The situation of Covid-2019 resulted in an imbalance in the selling price of masks.

To further analyze the success of determining the selling price of drugs at the UHO Education Pharmacy during the pandemic. So we can compare it by looking at the volume and sales turnover for medicines and personal protective equipment which increased in the period before and during the pandemic. The following is data on prices, volumes, and sales turnover for medicines and personal protective equipment that contribute the most to the annual revenue contribution at the UHO Education Pharmacy:

Table. 4
Price comparison data table, volume, and sales turnover for the
period 2019-2020

MULTIVITAMIN							
No	Medicine name	Pharmacy Selling Price (Rp)		Which Products Sold		Revenue (Rp)	
		2019	2020	2019	2020	2019	2020
1	Enervon C (strip)	5,000	5,500	175	250	875,000	1,375,000
2	Esther C	6,000	7,000	360	250	2,160,000	1,750,000
3	Becom C	18,000	21,000	540	715	9,720,000	15,015,000
4	CDR	35,000	47,000	48	60	1,680,000	2,820,000
5	Redoxon	33,000	47,000	72	45	2,376,000	2,115,000
6	Renovit	11,000	12,000	480	340	5,280,000	4,080,000
7	Vitalog C	6,000	8,000	192	248	1,152,000	1,984,000
8	Imboost	40,000	45,000	210	340	8,400,000	15,300,000
9	Vitamin C IPI	6,000	7,000	180	144	1,080,000	1,008,000

10	Vitamin B IPI	5,500	6,000	300	180	1,650,000	1,080,000
	TOTAL	165,500	205,500	2,557	2,572	34,373,000	46,527,000

Cough/Fever/FLU DRUG							
No	Medicine name	Pharmacy Selling Price (Rp)		Which Products Sold		Revenue (Rp)	
		2019	2020	2019	2020	2019	2020
1	Procol Flu	3,500	5,000	576	640	2,016,000	3,200,000
2	Ibuprofen	4,000	5,000	720	800	2,880,000	4,000,000
3	Mefanamethic Acid	6,000	5,000	788	940	4,728,000	4,700,000
4	Paratusin Syrup	33,000	41,000	420	344	13,860,000	14,104,000
5	Paratusin Tablet	14,000	16,500	841	564	11,774,000	9,306,000
6	Tremenza	20,000	19,500	480	511	9,600,000	9,964,500
7	Sanmol Syrup	16,000	15,500	576	589	9,216,000	9,129,500
8	Termorex	14,000	15,000	451	752	6,314,000	11,280,000
9	Orange Comic	15,000	20,000	615	515	9,225,000	10,300,000
10	Sanmol tablets	2,000	2,500	504	672	1,008,000	1,680,000
11	Tuesalus	5,000	5,500	576	655	2,880,000	3,602,500
12	thiamicin	34,000	36,000	415	422	14,110,000	15,192,000
13	OBH combi 60 ml	14,000	13,000	300	442	4,200,000	5,746,000
14	OBH menthol	14,000	19,000	288	345	4,032,000	6,555,000
15	Fatigon B complex	3,500	6,000	145	215	507,500	1,290,000
16	Bodrex Flu & Cough with phlegm	2,000	2,500	300	215	600,000	537,500
17	Bisolven extra	48,000	49,000	415	471	19,920,000	23,079,000
18	Blue Panadol	10,000	11,500	504	651	5,040,000	7,486,500
	TOTAL	258,000	287,500	8,914	9,743	121,910,500	141,152,500

BMHP							
No	Medicine name	Pharmacy Selling Price (Rp)		Which Products Sold		Revenue(Rp)	
		2019	2020	2019	2020	2019	2020
1	Fresh Care	5,000	5,500	180	200	900,000	1,100,000
2	TJ's Honey	6,000	7,000	168	154	1,008,000	1,078,000
3	TJ Honey 250 ml	18,000	21,000	140	122	2,520,000	2,562,000

4	Hand Sanitizer	10,000	15,000	522	864	5,220,000	12,960,000
	TOTAL	39,000	48,500	1.010	1,340	9,648,000	17,700,000

Source: Primary Data processed in 2021

The table above shows a comparison of sales data at the UHO Education Pharmacy for medicines and personal protective equipment before and during the entry of the pandemic in Indonesia, where the overall total for products sold in 2019 to 2020 experienced an increase, especially for the types of cough/fever medicines. /flu. Sales of medicines belonging to the multivitamin type where the products sold in 2019 amounted to 2,557 and an income of Rp.34,373,000 while for 2020 it increased by 2,527 with an income of Rp. 46,527,000. Furthermore, medicines that are classified as cough/fever/flu drugs where the products sold in 2019 amounted to 8,914 and income of Rp.121,910,500 while for 2020 it increased by 9,743 with income of Rp. 141,152,500. Lastly for other medicines where the products sold in 2019 amounted to 1,010 and revenues of Rp. 9,648,000 while for 2020 it increased by 1,340 with an income of Rp. 17,700,000.

Conclusion

Based on the results of research that has been carried out at the UHO Education Pharmacy, it can be concluded that the selling price of the UHO Education Pharmacy is calculated based on the PBF price (Big Pharmacy Company) or the invoice price plus VAT (if subject to VAT) then added to the profit set by the the pharmacy. An increase in the selling price of personal protective equipment and Covid-19 medicines at UHO Education pharmacies before the Covid-2019 and during Covid-2019, that almost all products related to the prevention and treatment of Covid-19 experienced an increase of up to 50% from their normal price.

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THE EFFECT OF E-TRUST, SERVICE FEATURES, AND PERCEIVED EASE OF USE ON E-SATISFACTION ON DANA APPLICATION USERS IN PONTIANAK CITY

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Abstract: This study aims to determine the effect of e-trust, service features, and perceived ease of use on e-satisfaction on DANA application users in Pontianak City. The type of research used is quantitative research in the form of causal associative, and data collection techniques are carried out through questionnaires. The population in this study were users of the DANA application in the city of Pontianak. The number of samples taken in this study were 100 respondents using a sampling technique, namely non-probability sampling with purposive sampling method, and the analytical tool used was multiple linear regression with the help of SPSS version 18. The results showed that e-trust, service features, and perceived ease of use partially and simultaneously had a significant effect on e-satisfaction of DANA application users in Pontianak City.

Keywords: e-trust, service features, perceived ease of use, e-satisfaction.

Introduction

Technological developments in the industrial era 4.0 are progressing rapidly, where technology has a very large influence in creating opportunities. People have started to leave the old system and switch to using a new technology system. In Indonesia, the rapid development of technology has led to an impetus for banks and financial intuition to develop a global system (Malini, H., 2021). However, online payments issued by conventional banks are almost surpassed by payments via e-wallet applications by several fintech companies. Based on data released by Bank Indonesia as of April 17, 2020, there are 49 e-wallet services that have received official permission from Indonesia, including 3 e-wallet providers for pre-employment card partners, namely OVO, LinkAja, and Gopay.

Due to the lack of access to bank accounts and the high number of people who do not have bank accounts, e-wallet is considered to be able to provide convenience for the public to transact online and offline in only one platform. From several e-wallets, DANA managed to take third place on the list of the largest e-wallet applications in Indonesia based on monthly active users and was in second place in the fourth quarter of 2019 based on the number of application downloads with ratings of 4.3 and 1,815,203 votes. This shows that although the DANA application is relatively new, the DANA application can easily compete with other e-wallet applications. e-trust is an important factor in analyzing the trust felt by users when making transactions (Khurshid et al., 2014). This trust is indispensable for users who want to use e-wallet. With the trust in electronics, people will not feel cheated and disappointed by the e-wallet. Features are product characteristics that are used as a complement to the function of the product (Kotler and Keller, 2012). DANA has several service features according to the needs of its users. In addition, users only provide a balance in the e-wallet to be able to enjoy the transaction service features provided by the e-wallet.

The DANA service features require more complete features so that the needs of users in transactions are met.

Perceived ease of use defined by Hartono (2007) Malini, H. (2021) is the extent to which a person believes that using a technology will be free of effort. With the ease of using DANA, users will find it easier to operate it to make transactions using DANA. If the user already believes in the DANA application, the service features in the DANA application already have the features that the user wants, and the ease of accessing the application, the user will be very satisfied with the DANA application. E-satisfaction is the cumulative result of a party or person who has different experiences with a product or service within a certain period of time (Szymanski & Hise in Al Hawari, 2014). User satisfaction and dissatisfaction is the user's response to the evaluation of the perceived discrepancy between previous expectations and the actual performance of the product that is felt after its use. Of course, DANA has several advantages that can make users interested in using it and feel satisfied. Based on the phenomenon, there are several factors that need to be known in determining e-satisfaction such as electronic trust (e-trust), service features, and perceived ease of use.

Literature Review

E-Trust

E-trust is a consumer's perception of how the website meets expectations, how reliable the website information is and the level of trust (Chang et al., 2013). Consumer trust will arise if he has received and felt satisfaction because he has used or consumed the product or service. Trust in internet-based services is called electronic trust (e-trust). e-trust consists of three indicators as follows (Kim *et al.*, 2003):

1. Ability
2. Benevolence
3. Integrity

Service Features

Service features are a competitive means of differentiating a company's products from those of competitors (Kotler & Armstrong, 2008). This effort can increase confidence in the completeness of the e-wallet. Service features according to Poon (2015) consist of four indicators, namely as follows:

1. Ease of Access to Information
2. Diversity of Transaction Services
3. Diversity of Features
4. Product Innovation

Perceived Ease Of Use

Wibowo (2006) defines perceived convenience as a measure where a person believes that the technology can be easily used and understood. An easy-to-use system results in increased user intention to use it as an easier-to-use system. Sun and Zhang (2015) suggest that there are four indicators of perceived ease of use, namely as follows:

1. Ease to Learn
2. Ease to Use
3. Clear and Understandable

4. Become Skilled

E-Satisfaction

E-satisfaction is defined as the cumulative result of a party or person having different experiences with a product or service within a certain period of time (Szymanski & Hise in Al Hawari, 2014). Satisfied consumers will tend to make repeat purchases, and recommend products or services. Meanwhile, dissatisfied consumers are more likely to switch to other brands. According to Pablos (2013), the e-satisfaction indicator has 4 dimensions, namely as follows:

1. Convenience
2. Customization
3. Security/Privacy
4. Web Appereance

Methods

This research is a quantitative research by distributing questionnaires. The population in this study were users of the DANA application in the city of Pontianak. The number of samples in this study were 100 respondents with the sampling technique using non-probability sampling in the form of purposive sampling. The analytical technique used is multiple linear regression analysis technique.

Findings

Multiple linear regression analysis is used to determine the effect of variables e-trust, service features, and perceived ease of use on e-satisfaction on DANA application users in Pontianak City. From the data processing with SPSS 18 results are obtained as shown in the following table:

Table 1. Result of Multiple Linear Regression Analysis

Variable	Regression Coefficient	T value	Sig.	R Square	F value	Sig
	B					
Constant	1,251			0,700	74,533	0,000
E-trust	0,335	4,878	0,000			
service features	0,282	2,807	0,006			
perceived ease of use	0,111	2,028	0,045			

Source: Primary Data Processing Results, 2022

From the table above can be determined multiple regresstion equation as follows:

$$Y = Q_1 X_1 + Q_2 X_2 + Q_3 X_3$$

$$Y = 0,335 X_1 + 0,282 X_2 + 0,111 X_3$$

Information:

Y : E-Satisfaction

β : Regression coefficient

X_1 : *E-trust*

X₂ : service features

X₃ : perceived ease of use

From the regression equation above, it can be explained several things from the results of research data processing, namely:

1. The regression coefficient of the e-trust variable (X₁) is 0.335 and significance 0,000, so e-trust has a positive and significant effect on e-satisfaction.
2. The regression coefficient of the service feature variable (X₂) is 0.282 and significance 0,006, so service features have a positive and significant effect on e-satisfaction
3. The regression coefficient for perceived ease of use (X₃) is 0.111 and significance 0,045,, so perceived of ease of use has a positive and significant effect on e-satisfaction.

Conclusion

Based on the results and data analysis that has been carried out, it can be concluded that the findings of this study state that E-trust has a positive and significant effect on e-satisfaction. Service features have a positive and significant effect on e-satisfaction. Perceived of ease of use has a positive and significant effect on e-satisfaction. E-trust, service features, and perceived ease of use together have a significant effect on e-satisfaction for DANA application users in Pontianak City.

In order for DANA users to remain loyal to the DANA application, the DANA company also needs to improve service features such as expanding provincial areas in e-samsat, PBB, and education services to make it easier for users to make online transactions because these services only provide for a few provinces and DANA must be able to innovate by providing the latest service features for its users, such as providing train and plane ticket purchases as well as hotel bookings. For further researchers, the authors hope to add other variables outside of the variables studied, as for the variables that can affect the e-satisfaction variable and can position e-trust as a mediating variable. In addition, it is expected to expand the scope of the research area, for example throughout Indonesia and be able to use a larger number of respondents from this research so that the data obtained is more relevant.

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The Relationship Between Institutional Ownership, Capital Structure, and Firm Value: Research on LQ45 Index Companies

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Abstract: From a financial perspective, maximizing shareholder wealth is the company's main goal. The achievement of these objective should be supported by good corporate governance and financial decisions. This study tries to examine the effect of institutional ownership as part of corporate governance on firm value through capital structure as mediator. Panel data were obtained from 28 companies that were consistently listed in the LQ45 Index on the Indonesia Stock Exchange in 2017 to 2021. Data testing is done by regression analysis and Sobel test using the common effect modal approach. This study is expected to provide theoretical implications for the relationship between the determinants of the company's financial performance, as well as provide empirical implications for efforts to maximize firm value.

Keywords: institutional ownership, capital structure, firm value.

Introduction

The goal of maximizing shareholder wealth is often interpreted as an effort to maximize firm value. Firm value is technically the end result of all management decisions, including corporate resource decisions. (Modigliani dan Miller, 1963; Ross, 1977; Kaur, 2022).

The autocritic of Modigliani and Miller (1963) provides an initial view as well as theoretical impetus on how the relationship between capital structure and firm value. Various views with more complex variables emerged with their respective prepositions, such as agency theory which has a main concern on the relationship between shareholders and company management (Jensen and Meckling, 1976).

Specifically in relation to capital structure, agency theory involves debt factors and ownership structure as a monitoring tool for management (Grossman and Hart, 1982). Institutional ownership in companies is considered a tool for monitoring and implementing good corporate governance so as to reduce the use of corporate debt (Bathala, et al., 1994; Moh'd, et al., 1998; Suteja, 2017), as well as contributing to the role of firm value (Navissi and Naiker, 2006; Sienatra, et al., 2015; Khamis et al., 2015; Malini, H. (2019)).

Previous literature has largely formulated the relationship between ownership structure, capital structure, and firm value, but there is little empirical evidence regarding the relationship between the three. It is interesting to re-examine the relationship between ownership structure, capital structure, and firm value with a focus on institutional ownership as part of the ownership structure, especially in a country with a tendency for corporate ownership to be concentrated in institutions like Indonesia.

Literatur Review and Hypothesis Development

Firm value is interpreted as an indicator of shareholder wealth as well as an investor's perception of the company. Fama (1978) states that firm value is relevant to shareholder wealth as reflected

in the company's stock price. Furthermore, Brigham and Houston (2012: 152) state that firm value can be measured by the price book value (PBV) ratio. The PBV ratio shows the level of the company's ability to create value relative to the amount of capital invested. A high PBV reflects a high share price compared to book value per share. The higher the share price, the more successful the company in increasing shareholder value (Kusumawati and Setiawan, 2019).

Firm value as a representation of the company's shareholder wealth is always influenced by the ownership structure of the company itself (Navissi and Naiker, 2006). Jensen and Meckling (1967) said that the ownership structure in addition to manager ownership in the corporate governance mechanism is outside ownership, including institutional ownership. Institutional ownership refers to the equity ownership of the company by the institution (Kusumawati and Setiawan, 2019). Moh'd, et al. (1988) described institutional ownership as the percentage of shares owned by institutional investors.

Institutional owners play a key role in controlling the corporation which in general the existence of institutional owners is considered to be able to influence corporate behavior. Grier and Zychowicz (1994) said that the relatively large portion of company ownership from the institution has a supervisory role in the company's management, this is done in order to protect its investment decisions. The presence of the institution as a supervisory agent is considered to be able to minimize agency conflicts between shareholders and management (Fama, 1980). Simultaneously, this monitoring is considered to be able to encourage company performance and contribute to increasing firm value (Navissi and Naiker, 2006; Sienatra, et al., 2015; Khamis et al., 2015). Referring to these arguments, we conclude the following hypotheses:

H₁: Institutional ownership has a positive effect on firm value.

Firm value in various perspectives is a representation of the firm's financial decisions (Fama, 1978). Modigliani and Miller (1963) stated that the company's funding decisions related to the company's capital structure can affect the firm's value. The capital structure is described as a balance between the composition of the company's debt and equity (Majumdar and Chhibber, 1999). The balance of debt and equity levels of the company has a role in shaping investor perceptions of the company.

Trade-off theory explains the advantages and disadvantages of using debt in an optimal capital structure, which is related to the tax shield (Modigliani and Miller, 1963), bankruptcy costs (Warner, 1977), and corporate agency costs (Jensen and Meckling, 1976). In simple terms, this view tolerates the use of debt by the company up to a certain point or optimal which will then increase the value of the company, and decrease it when debt is outside the optimal point (Eunike and Gunrsih, 2012) Malini, H. (2020).

Myers and Majluf (1984) in another view highlight the problem of information asymmetry between management and company shareholders so that companies tend to prefer internal funding. Myers (1984) explains that companies will make funding decisions in a hierarchical manner, from internal funding to external funding (pecking order theory), where internal funding tends to be minimal in information asymmetry problems. The lack of information asymmetry at the same time can be interpreted as the lack of agency problems in the company which in turn can increase the value of the company.

The two major concepts related to the relationship between capital structure and firm value provide direction on how we form the hypothesis. Although the trade-off theory seems to favor the use of debt, it is important to always be aware of the consequences of debt that are outside the optimal point. In the pecking order theory, debt is an alternative to internal funding sources, debt is considered quite sensitive to information asymmetry problems. Previous studies related to the capital structure of companies in Indonesia worked with the pecking order model in their funding decisions (Harjito, 2011; Oktavina, et al., 2018). The relationship between capital structure and firm value shows the relevance that capital structure with high debt composition has a negative impact on firm value, this is evidenced by Majumdar and Chhibber (1999), Le

and Phan (2017), and Forte and Tavares (2019). Referring to the theoretical study and empirical evidence, the following hypothesis is built:

H₂: Capital structure negatively affects firm value.

The concepts of corporate capital structure from various perspectives cannot be separated from taking into account agency problems in their formulation. Agency theory provides its own argument by focusing on a capital structure that can minimize agency costs (Harjito, 2011). The use of debt as a management monitoring agent seems to be substituted by the presence of institutional investors. Grier and Zychowicz (1994) mention the monitoring engendered by active institutional ownership, and the potential for large shareholders to exert disciplinary pressure on management through the corporate governance process is also a debt-related function.

The relationship between institutional ownership and capital structure according to Suteja (2017) can be described as a relationship that is monitoring-substitution effect. Institutional investors will become supervisory agents for management who can control management's opportunistic behavior so as to allow management to use debt levels optimally, while a substitutional relationship is an increase in the proportion of share ownership by institutional investors that can replace the need for debt in reducing agency conflicts. The existence of a monitoring-substitution effect relationship as described above, shows that institutional ownership has an inversely proportional effect on the company's capital structure. This is proven by research from Bathala, et al. (1994), Moh'd, et al. (1998), and Suteja (2017) who show that institutional ownership has a negative effect on capital structure. Based on the description, it can be proposed the following hypothesis formulation:

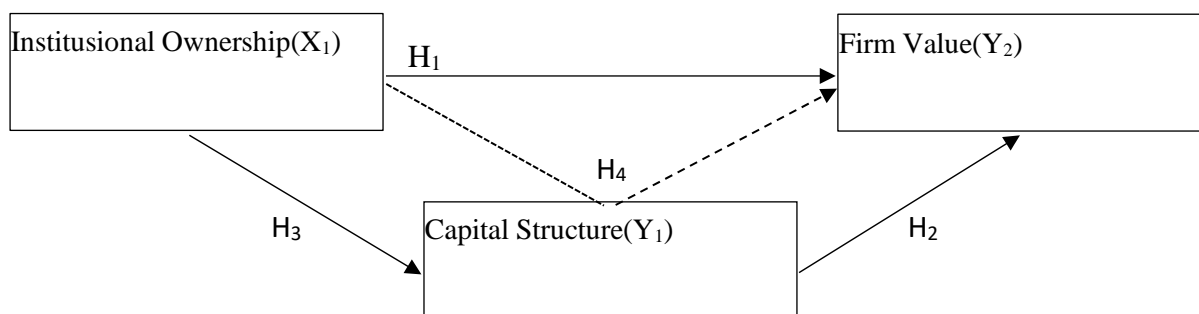
H₃: Institutional ownership negatively affects capital structure.

The description of the relationship between institutional ownership and the use of debt with a monitoring-substitution effect, as well as the decreasing use of debt in the capital structure encourage an increase in firm value. In the perspective of agency theory, this indicates that the capital structure has a role as a mediator in the relationship between institutional ownership and firm value. This is in line with the research of Okiro, et al. (2015) and Muthoni, et al. (2018) who found that capital structure was able to mediate the effect of institutional ownership on firm value. Based on the relevance of the last argument, we formulate the following hypothesis:

H₄: Institutional ownership affects the value of the company with the capital structure as a mediator.

Based on the overall description of the framework of thought above, the conceptual framework in this research is as follows:

Figure 1. The Conceptual Framework



Methods

Study Area and Resource of The Data

The research population is the companies that are included in the LQ45 Index. The purposive sampling technique was used in this study with the criteria for companies being consistently incorporated in the LQ45 Index during 2017 to 2021. Based on these criteria, 28 of 45 companies were obtained as research samples. Secondary data obtained from the company's financial statements during the research period.

Operational Definitions and Variable Measurement

1. Institutional Ownership

Institutional ownership is the percentage of shares owned by institutional parties (Moh'd, et al., 1998):

$$\text{Institutional Ownership} = \frac{\text{Number of Institutional Stock}}{\text{Number of Shares Outstanding}}$$

2. Capital Structure

The capital structure is measured by the debt to equity ratio (DER). According to Majumdar and Chhibber (1999):

$$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

3. Firm Value

According to Brigham and Houston (2012: 152) an assessment of the company's marketvalue using the price to book value ratio (PBV) can represent the firm's value:

$$\text{Price to Book Value Ratio (PBV)} = \frac{\text{Price per Share}}{\text{Book Value per Share}}$$

Data Analysis Methods and Models

The panel data in this research were analyzed by linear regression method with a common effect model approach. Path analysis was then performed to test the hypothesis and Sobel test to test the capital structure mediation. Referring to Ghazali (2018: 247), the model used in testing this research hypothesis is as follows:

$$\text{DER} = \alpha + \beta_1\text{IOW} + \varepsilon \dots \dots \dots (1)$$

$$\text{PBV} = \alpha + \beta_1\text{IOW} + \beta_2\text{DER} + \varepsilon \dots \dots \dots (2)$$

Where:

PBV = Firm Value

DER = Capital Structure

IOW = Institutional Ownership

α = Constant

β = Regression Coefficient

ε = Error Term

Findings

Descriptive Statistics Analysis

The following is a descriptive analysis of the 28 companies that are members of the LQ45 Index in the period 2017 to 2021:

Table 1. Descriptive Statistics

Item	N	Range	Minimum	Maximum	Mean	Std. Deviation
IOW	140	.92	.00	.92	.4278	.3150
DER	140	15.93	.14	16.08	2.1198	2.7163
PBV	140	81.87	.57	82.44	4.2621	10.6684
Valid N (likewise)	140					

Companies that are included in the LQ45 Index are not entirely guaranteed by the presence of institutional ownership (minimum IOW value of 0.000). Companies without institutional ownership are companies with direct ownership by the Government of the Republic of Indonesia. Apart from that, it can also be seen that companies on this index tend to work with a capital structure that has a debt composition that is greater than equity (mean DER value of 2.1198). However, in general, companies in this index have a higher market value than the company's book value (mean PBV value of 4.2621), in other words, companies have a high value.

Classical Assumption Test

Classical assumption testing in this research includes tests for normality, autocorrelation, heteroscedasticity, multicollinearity, and linearity. Each of these tests was carried out using the One-Sample Kolmogorov-Smirnov method with the Monte Carlo approach, Run test, Spearman's Rho test, identification of tolerance values, and ANOVA test by identifying the linearity significance value. The results of the testing of the two models in this study are confirmed to have fulfilled all of the classical assumptions.

Correlation Coefficient Analysis and Goodness of Fit

Table 2. Goodness of Fit Correlation Test Results

Item	Model	
	1	2
Correlation Coefficient		
R	.681	.268
Determination Coefficient		
Adjusted R Square	.460	.058
F Statistic Test		
df ₁	1	2
df ₂	124	130
F	107.293**	5.029**

Level of Significance: **0.01 dan *0.05
Source: Output Data of SPSS 22, 2022

Based on the test results, the value of the correlation coefficient (R) of the two models in this research shows that there is a strong correlation between IOW and DER in the first model, while the relationship between variables in the second model is still weak. The value of the coefficient of determination (R^2) is not more than 0.5 indicating that the independent variables still lacking in the ability of the independent variable to explain changes in the dependent variable in the two models. The results of the F statistical test indicate that the two models in this research are worthy of further research.

Hypothesis Testing

Hypothesis testing is carried out by identifying the t-value of each variable in the research model. To determine the ability of capital structure as a mediator, the Sobel test was conducted. The following presents the results of the t-statistical test in this research:

Table 3. t-Statistic Test Results

Item	Model	
	1	2
Rgression Equation		
Constant	3.183	1.717
IOW	-3.769	1.117
DER		-.007
F Statistic Test		
IOW	-10.358**	2.511*
DER		-.143

Level of Significance: **0.01 dan *0.05
Source: Output Data of SPSS 22, 2022

Referring to the results of the t-test in Table 3, in the second model it was found that institutional ownership has a positive effect on firm value (H_1 is accepted). The results of this test indicate that the presence of institutional shareholders has an effective supervisory and controlling role in the company, thereby being able to encourage company performance and ultimately increase firm value.

The next test results show that the capital structure has no effect on firm value (H_2 is rejected). This fact shows that investors in companies that are members of the LQ45 Index during 2017 to 2021 ignore the capital structure in their investment decisions. This is relevant to the view that investors in LQ45 Index companies focus on transaction value, liquidity and market capitalization, and tend to ignore the company's fundamental aspects.

Testing the effect of institutional ownership on the capital structure in the first model shows that there is a negative effect of institutional ownership on the capital structure (H_3 is accepted). The acceptance of this hypothesis is relevant to the concept of monitoring-substitution effect, that the presence of institutional investors in the company will become a supervisory agent that allows the company to use debt at a lower level.

The mediation test using the Sobel test in the first and second models obtained a t-value of 0.142. These results indicate that capital structure cannot mediate the influence of institutional ownership on firm value (H_4 is rejected). The minimal role of the capital structure in the formation of firm value is considered to be the cause of the inability of the capital structure to

mediate the effect of institutional ownership on firm value. The results of this study indicate that institutional ownership is able to directly influence the value of the company without going through the company's capital structure, in other words the results of this test provide empirical evidence of the existence of partial mediation in this research.

Conclusion

The results of the test show that institutional ownership has a positive effect on firm value, while capital structure has no effect. The presence of institutional shareholders will reduce the company's capital structure in accordance with the concept of monitoring-substitution effect. The results of the mediation variable test show that the capital structure is not able to mediate the influence of institutional ownership on firm value. The absence of a mediating effect of capital structure indicates that capital structure cannot determine the influence of ownership structure on firm performance and value. Based on the results of this study, it is hoped that future researchers will be able to consider other components of the ownership structure and involve other fundamental components as determinants of firm value.

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DECISION MAKING TO DETERMINE NEW PRODUCT INNOVATIONS AT PT PERTAMINA REFINERY UNIT VI BALONGAN DURING PANDEMIC COVID 19 BY USING ANALYTIC HIERARCHY PROCESS

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Abstract. PT. Pertamina RU VI Balongan is the sixth refinery of seven refineries owned by PT Pertamina (Persero) with its main business activities being to process crude oil and naphtha into products of fuel oil (BBM), special fuel (BBK), non-fuel Fuel Oil (NBBM) and other products. The Covid-19 pandemic has affected the economy all over the world, including Indonesia. All industrial sectors have experienced a significant impact with the COVID-19 outbreak, including PT Pertamina and in particular Pertamina Refinery Unit VI Balongan.

The significant decline in demand for National BBM & BBK consumption has created a domino effect on the operations of Pertamina refineries. With the case that has occurred is slowdown capacity and stop some Refinery Units. Pertamina is required to survive in the midst of current conditions while maintaining unit operations and generating revenue/margin through optimization, efficiency and product diversification. As an effort to maintain the company's business continuity, Pertamina RU VI Balongan seeks to innovate to produce new products that can be sold to domestic and foreign markets.

This thesis studies how to determine the selection or decision-making process to determine the best product innovations that can be offered to consumers, especially during the COVID-19 pandemic using the Analytic Hierarchy Process (AHP) method. Based on the results of AHP with the help of super decision software, it can be seen that the quality aspect is the main criterion for the priority of determining new product innovation (38.7%) followed by product selling price (34.8%), volume (14.6%), product distribution (7.5%), and modification costs (4.2%). Furthermore, for the ranking of alternatives weighted based on the criteria, Pertadex low Sulfur products were obtained as the highest priority (53.1%), followed by low sulfur Solar products (24.6%), LCO Mix products (13.6%), and Go Foam products. (8.7%).

Keywords: Pandemic Covid 19, Analytic Hierarchy Process (AHP), New Product Innovation

INTRODUCTION

The COVID-19 pandemic has had a huge impact on the global economy. Indonesia has also experienced the impact of the Covid-19 pandemic. The government implemented a Large-Scale Social Restriction (PSBB) policy during the Covid-19 pandemic to reduce the mobility of people from one place to another, maintain distance, and reduce crowds that pose a big risk to the spread of Covid-19.

This has resulted in a significant decrease in demand for consumption of BBM (Fuel Oil) & BBK (Special Fuel) Nationally (Sharma, 2020). The decline in demand for fuel consumption and BBK has an impact on the operations of oil refineries, including PT. Pertamina. The main director of

PT. Pertamina Nicke Widyawati said that PT. Pertamina experienced a triple shock as a result of the Covid-19 pandemic, namely: Decrease in domestic fuel consumption, The decline in the rupiah exchange rate, and The decline in world crude oil prices.

PT. Pertamina RU VI Balongan suffered several losses during the triple shock. Some of these losses are slowdown in capacity, downgrade of diesel products (valuable) to Decant Oil Products (non-valuable) caused by oversupply tank stock, then diesel and avtur products experienced a decline in demand in the market.

A sustainable planning strategy is very important for a company because it allows the company to survive in the longer term. The continuous planning strategy is one of the company's ways to anticipate and overcome disruptions so that the risk of losses experienced can be reduced and business operations can continue to run. One of the planning strategies that can be done is product innovation. The way to manage new product innovation is to consider the possible products to offer to consumers.

PT. Pertamina RU VI Balongan has several product innovations that have the opportunity to be offered to consumers. The product innovations are LCO Mix, Go Foam, Pertadex low sulfur, and Solar low sulfur. Each product innovation has different criteria in terms of price, volume, quality, cost, and delivery so that a selection or decision-making process is needed to determine the best product innovation that can be offered to consumers.

LITERATURE REVIEW

Analytic Hierarchy Process (AHP) is a decision-making method that gains importance through pairwise comparisons between attributes that constitute a hierarchical structure. AHP will divide the decision-making process into several stages which continue to the final decision by objectifying subjective judgments based on the results of the analysis. This will systematically sort the alternatives and derive them as a percentage scale that reflects the weights.

AHP method is used to determine the priorities of the criteria and alternative product innovations that will be used as parameters in determining the best new product innovations that can be offered to Pertamina RU VI Balongan, especially during the COVID-19 pandemic.

AHP allows the sustainability of each alternative that is calculated by classifying interests in a hierarchy that is suitable for solving a large number of decision problems (Myoeng, Jung, & Lee, 2018). AHP consists of three steps according to Saaty & Vargas (2006) :

- 1) Hierarchy formation

The formation of a hierarchy consists of decision objectives, decision criteria, sub-criteria, and decision alternative

- 2) Pairwise Comparisons
- 3) Verification of consistency

In this study, the authors will use the assistance of the Super Decisions program. Super Decisions aims to make a selection from several alternative options based on predetermined criteria. Super Decisions is an implementation of the AHP method for decision making developed by Saaty & Vargas (2006). Decision making involves solving problems into decision elements, organized through a hierarchical structure, making values of relative importance from pairs of elements, and synthesizing the results

METHODOLOGY

The following is the research concept framework used by authors to analyze the problems at PT. Pertamina RU VI Balongan:

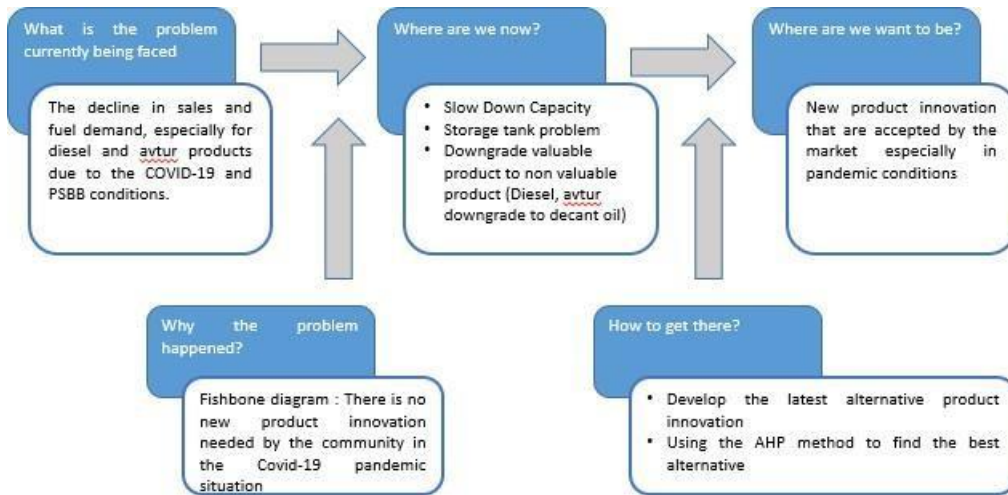


Figure 1. Conceptual Framework used in research

There are six stages that will be used to answer the problem in the research, which are as follows:

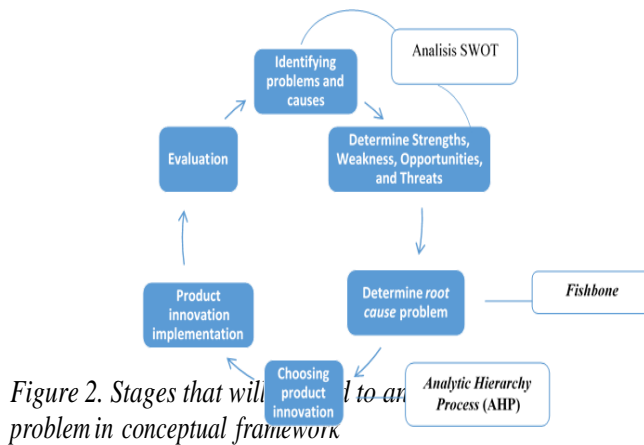


Figure 2. Stages that will be used to answer the problem in conceptual framework

Step 1. Identifying Problems and Causes. PT. Pertamina experienced a triple shock and several losses during the COVID-19 pandemic. Some of these losses were the slowdown in capacity, downgrade of diesel products (valuable) to Decant Oil Products (non-valuable) due to oversupply tank stock and a decline in demand for diesel and avtur products in Indonesia market.

Step 2. Determining Strengths, Weaknesses, Potentials, and Threats

SWOT analysis aims to answer strategic challenges, capitalize on strategic opportunities, take advantage of strategic advantages, and overcome strategic weaknesses.

Step 3. Determine the root cause of the problem with Fishbone Diagram

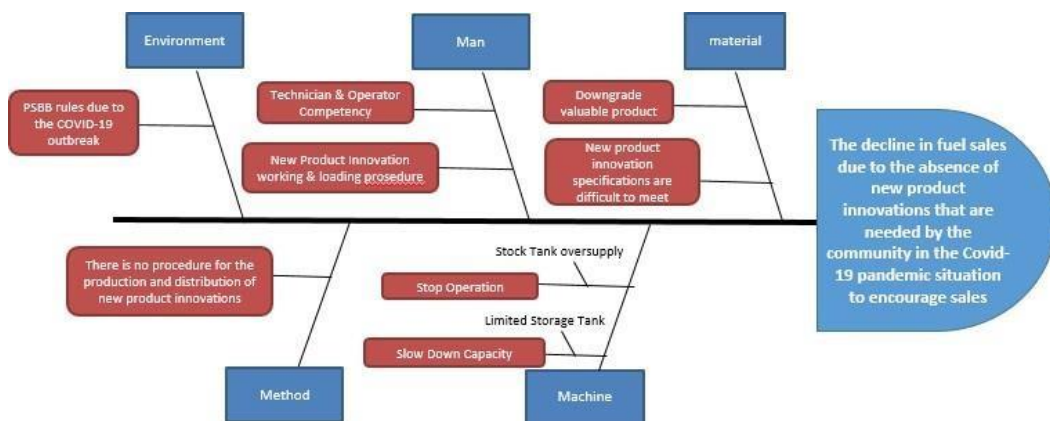


Figure 3. Fishbone Diagram for Pertamina's Product Sales Decrease

Based on the fishbone diagram above, it can be seen that the main cause of the decline in demand and sales of fuel is due to the COVID-19 pandemic which can cause slow down capacity, downgrade valuable products to non-valuable products and even stop operations due to production oversupply and limited product storage tanks.

For this reason, a new product innovation is needed, especially during the Covid 19 pandemic which is needed by the community to encourage an increase in demand and sales of Pertamina's fuel products, especially diesel and avtur products.

Step 4. Choosing the Best Product Innovation

a focus group discussion was held which was attended by High Level Management (Director, Vice President) at the head office as well as the General Manager and Management Teams in all Pertamina Refinery Units. Then the new product innovation alternatives that have been determined are analyzed using the Analysis Hierarchy Process (AHP) method with the criteria of price, quality, volume, cost, and delivery. Based on the FGD results, four alternative new product innovations were obtained, namely: LCO Mix, Go Foam, Pertadex Low Sulfur, Solar Low Sulfur.

Step 5. Product Innovation Implementation

The selected new product innovations are the best new product innovations selected through AHP analysis of several alternatives, namely LCO Mix, Go Foam, Pertadex low sulfur, and Solar low sulfur.

Step 6. Evaluation

Evaluation is a monitoring stage carried out by the Refinery Planning & Optimization (RPO) Division to ensure that new product innovations can effectively solve the problems faced by PT. Pertamina RU VI Balongan, especially during the covid pandemic.

FINDINGS AND ARGUMENT

The use of the AHP method is expected to help decide the best strategy used to solve the impact of the covid 19 pandemic on the decline in fuel demand which has an impact on the high national stock so that new product innovations are needed to prevent the impact on the Refinery Unit's operations.

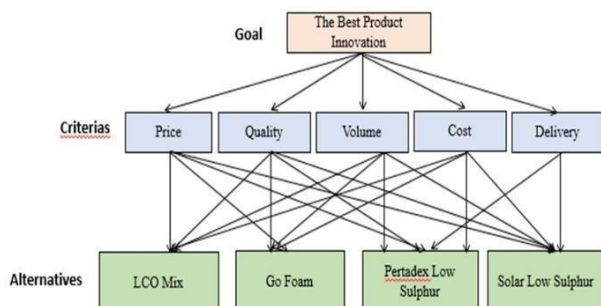


Figure 4. AHP Hierarchy Structure

AHP process structure model begins with setting the goal, for this research the goal is to get the best product innovation based on criterias. The next level is defining the criteria that are going to be used in the process, criterias selected for this research are price, quality, volume, cost, and delivery. Those criteria are selected based on analysis and experienced of author and the FGD process within company internals.

Alternatives defined in level 3 are the selecting the best product innovation in PT Pertamina RU VI Balongan, namely: LCO Mix, Go Foam, Solar low Sulphur and Pertadex low Sulphur.

CONCLUSIONS

Table 1. Priorities for Alternative New Product Innovation

Here are the priorities.				
Icon	Name		Normalized by Cluster	Limiting
No Icon	Go Foam		0.08676	0.043380
No Icon	LCO Mix		0.13616	0.068079
No Icon	Pertadex Low Sulphur		0.53118	0.265589
No Icon	Solar Low Sulphur		0.24590	0.122952

innovations because it have the highest product prices compared to other product (Solar low sulfur, LCO Mix and Go Foam). In addition,

Based on the results from table 1 above, it can be seen that the priorities for alternative new product innovation that have the highest weightvalue are Pertadex low sulfur products at 53.11%, followed by low sulfur diesel products. by 24.59%, LCO mix products by 13.61% and Go Foam products by 8.67%.

Pertadex low sulfur has a fairly large market potential both domestically and internationally and in terms of quality has met the specifications for environmentally friendly products or equivalent to Euro 4 and Euro 5

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Proposed Strategy to Reduce The Number of Temperature Excursions of Covid-19 Vaccines at PT XYZ

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Abstract: The Covid-19 virus pandemic is a coronavirus currently faced by the world. 10 out of 7.800 shipments of the Covid-19 vaccine have been officially reported to PT XYZ as temperature excursions from January to December 2021. The business analysis is explained on the DMAIC Framework, PESTLE Analysis, Resource-Based View (RBV), and Root Cause Analysis (RCA). The main causes of temperature excursions are high workload, not followed the WHO latest standards, and differences in perception between regions. The alternative solutions are implementing PCM, implementing the Internet of Things (IoT), and implementing blockchain. The result of feasibility study is that the PCM procurement budget is lower than the risk of loss due to temperature excursions. IoT submissions consist of smart containers, smart vehicles, and SmartApp. The blockchain has a framework composed of six layers. This alternative solution is expected to help PT XYZ reduce the incidence of temperature excursions.

Keywords: Temperature Excursions, PCM, IoT, Blockchain, Covid-19 Vaccine

Introduction

The Covid-19 virus pandemic is a coronavirus currently faced by the world. Indonesia is one of the positive countries for Covid-19, positive cases of Covid-19 in Indonesia were first detected on March 2, 2020 (Alifah & Yunita, 2021). The arrival of the vaccine brings fresh air to return conditions to normal. When it first appeared in January 2021, the vaccine was predicted to be a game-changer that would eventually be able to reverse the previously unstoppable wave of Covid-19 (Kantor Asisten Deputi Sekretariat Kabinet Bidang Naskah dan Terjemahan, 2021). The distribution of the Covid-19 Vaccine will be carried out through the assignment of PT XYZ or the direct appointment of a business entity by the Minister.

During the distribution of the covid-19 vaccine from early January to December 2021, several cases of temperature excursion have been officially reported to PT XYZ. 10 out of 7.800 shipments of the Covid-19 vaccine, or approximately 0.128%, have been reported to PT XYZ as experiencing temperature excursion. As shown in Table 1, the average amount of vaccine in one shipment is 42.639 doses which means the total number of temperature excursions that have been reported to PT XYZ is around 426.390 doses in 2021.

Table 1. Covid-19 Vaccine Distribution at PT XYZ

Vaccine Distribution								
No.	Month	Sinovax	Novavax	Covax/Gavi	AstraZeneca	Pfizer	Moderna	Amount Per Month
Q1	Jan	5.817.000						5.817.000
	Feb	10.450.000						10.450.000
	Mar	13.300.000						13.300.000
Q2	Apr	14.297.000		6.000.000	150.000			20.447.000
	May	9.910.000		6.000.000	150.000			16.060.000
	Jun	7.640.000	4.000.000	6.000.000	1.000.000			18.640.000
Q3	Jul	8.960.000	8.000.000	6.000.000	2.400.000	4.000.000	N/A	29.360.000
	Aug	11.150.000	8.000.000	6.000.000	7.700.000	4.000.000	N/A	36.850.000
	Sep	8.920.000	8.000.000	6.000.000	11.900.000	4.000.000	N/A	38.820.000
Q4	Oct	8.590.000	17.000.000	6.000.000	11.900.000	4.000.000	N/A	47.490.000
	Nov	8.630.000	17.000.000	6.000.000	11.900.000	4.000.000	N/A	47.530.000
	Dec	8.920.000	17.000.000	6.000.000	11.900.000	4.000.000	N/A	47.820.000
Total in 2021		116.584.000	79.000.000	54.000.000	59.000.000	24.000.000	-	332.584.000
Total Shipment in 2021								7.800
Average Vaccine Distribution per Shipment								42.639

Aside from the number of temperature excursions that have been reported to PT XYZ by 0.128%, according to staff of the distribution division at PT XYZ, the number of temperature excursions from the Covid-19 vaccine that are not reported can reach 15% of the total distribution. Although the temperature of the vaccine is still within the tolerance limit according to WHO rules, because of perceptions from different consumers, the vaccine must be sent back to PT XYZ, which results in inhibition of covid-19 vaccination in areas with an excursion temperature.

Countries in the world, including Indonesia, are currently in a state of emergency in the face of the Covid-19 pandemic. In the current conditions, the role of vaccines is vital in the fight against Covid-19, so any kind of damage to the vaccine will be very detrimental and cannot be accepted. State losses caused by damage to the Covid-19 vaccine due to temperature excursion are estimated to reach Rp 137 billion. They will lead to even more significant losses if the number of unreported temperature excursion cases is counted. However, temperature excursions do not always lead to vaccine damages. It suggests that a single temperature excursion or repeated heat exposure cannot guarantee severe damage to vaccines (Goldwood & Diesburg, 2018).

In a broad view, issues in temperature excursion can hinder the achievement of herd immunity in Indonesia. Achieving herd immunity is critical because it has a vast and wide-ranging impact on its health, economic sector, and stability. The Ministry of Finance estimates that the Covid-19 pandemic will bring the lost national economic value to Rp 1,356 trillion by 2020 (Victoria, 2021). This number will, of course, increase if the Covid-19 pandemic does not end.

Literature Review

Reception of Products, PPE, and Ancillary Products

The arrival of vaccines from abroad is crucial because it becomes the first gate before spreading to the public. If the vaccines that arrive are damaged, they can be quickly sorted and reported problems to WHO. The guidance is presented by the health services store level: port of entry, central and subnational levels. At the port of entry, ensure that customs clearance arrangements have been established and that transportation or storage arrangements are in place (WHO, 2020).

Storage of Vaccines and Ancillary Products

The guidance on COVID-19 vaccine storage and temperature monitoring is dependent on the country's supply chain infrastructure, the government's cold chain storage and equipment capacity, the availability of cold chain storage in the private leasing market, and the key characteristics and thermostability requirements of the new vaccines. The prospective COVID-19 vaccine candidates now being developed can be divided into three categories based on storage needs (as of January 2021) (WHO, 2020). Vaccines that required to be stored at 2 °C to 8 °C, vaccines that required to be stored at -20 °C, and Vaccines that required to be stored at -70 °C +/-10 °C: where significant investment in UCC storage capacity and training in handling vaccines and ULT equipment will be necessary.

Repackaging Vaccines and Ancillary Items

Most COVID vaccines will necessitate cold chain transport at 2 °C to 8 °C. Refrigerated vehicles from the national level are recommended, but if these are not available in your country, other standards of WHO performance, quality, and safety prequalified containers can be used. For vaccines requiring UCC, the vaccination strategy

recommended is fixed posts, which should not require repackaging. Specialized containers, such as Arktek + phase change material (PCM) or thermal shipper + dry ice, should be used if internal transport is required (WHO, 2020).

Production or Purchase of Coolant Packs

According to WHO supply and logistics guidance (WHO, 2020), For vaccines requiring storage and transportation between 2 °C to 8 °C: Refrigerated water packs and conditioned ice packs. For vaccines requiring storage and transportation at -20 °C, use ice or gel packs. For vaccines requiring storage and transportation at -60°C, use an ultra-low temperature cold chain (UCC). The UCC equipment encompasses active equipment (ULT freezers) that store vaccines at very low temperatures (-80 °C/-60 °C) and passive equipment (ULT insulated containers) that are used to store or distribute low-temperature vaccines (WHO, 2020).

Transportation of Vaccines

Data loggers are the preferred option for monitoring the temperature during transportation as they observe the vial temperature throughout the vehicle. The temperature of the vaccine should be duly documented: For data loggers inside the container, check the temperature at the beginning and end of the trip (avoid exposing vaccines through frequent openings). For data loggers with an outside reader, check the temperature at least twice during the trip.

Reverse Logistics

Reverse logistics means retrieving unused vaccines and other supplies, either disposed or reused. In the context of COVID-19 vaccination, most COVID-19 vaccines will be initially used under the WHO EUL recommendation; initially, some vaccines may come without a VVM. Most vaccines will only come with a manufacturing date instead of an expiry. Ensuring all vaccine vials are duly accounted for in every health facility is critical for safety and accountability. Any unused vials must be returned to the higher level store (WHO, 2020).

Human Resources

Due to high volumes of vaccines and ancillary products during COVID-19 vaccine deployment, staff shortages may occur due to additional workload or staff unavailability due to sickness, injury, or care for their families. Other personnel with the right skillset trained, motivated, and supported is crucial (WHO, 2020). Under such scenarios, make sure to identify additional human resources, plan hiring and training ahead of time, and ensure that health workers are protected and secured to do their jobs

Monitoring and Management of Supply Chain Information

Close management of supply chain information will be essential for successfully deploying the Covid-19 vaccine (WHO, 2020). This monitoring supply chain includes monitoring cold chain capacity and performance for safe storage space availability at target sites/ distribution points, monitoring stock distribution and consumption to ensure the correct quantity of vaccines are distributed to every site and to ensure their appropriate usage, and ensuring sufficient distribution capacity (vehicles, transport boxes, carriers) to deliver the Covid-19 and routine vaccines on schedule

Methods

This research adopts qualitative methods. The qualitative method consists of two types of data (primary and secondary) covering direct observation at P.T. XYZ,

interviews, historical study, and literature study. The data is carried out to support the external and internal business analysis. The data will be processed with DMAIC Six Sigma Framework, PESTLE Analysis to analyze the external factor, and Resource-BasedView (RBV) to investigate the internal aspect. To figure out the current business problemsituation, the researcher develops a conceptual framework that is adapted and modified from WHO's guidance (Figure 1) (WHO, 2020).

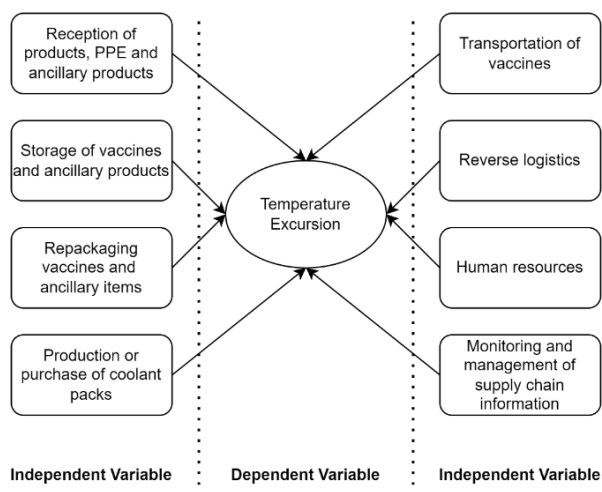


Figure 1. Conceptual Framework

The root cause analysis method is used to find the root problems. Root cause analysis using current reality tree was chosen because this technique enables undesirable understanding effects (U.E.) in all processes, e.g., strategy, activities, organization, and resources. After that proposed alternative solutions that suit P.T. XYZ to handle the temperature excursion. Implementing alternative solutions will be carried out according to the PDCA method.

Findings

A. Root Cause Analysis

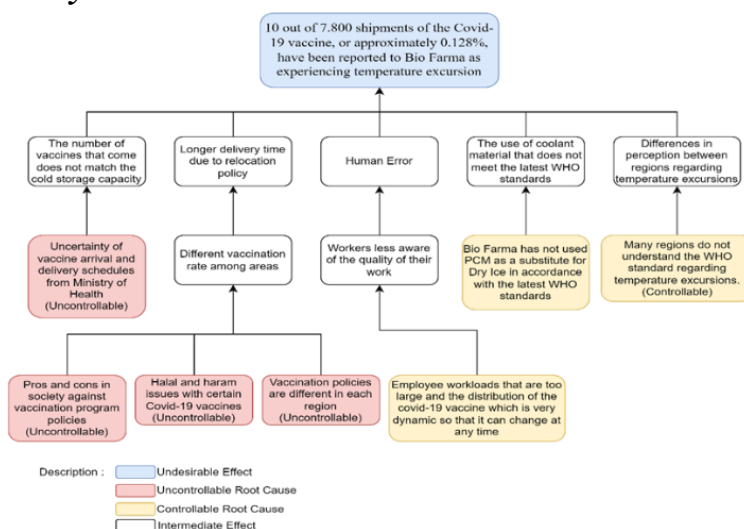


Figure 2. Current Reality Tree

Based on Figure 2, the undesirable effect in this research is that 10 out of 7.800 shipments of the Covid-19 vaccine, or approximately 0.128%, have been reported to PT XYZ as experiencing temperature excursion. According to WHO Guidance, temperature excursion is driven by eight factors. Five main factors drive the temperature excursion at PT

XYZ when distributing the Covid-19 vaccine, but PT XYZ can control only three main factors.

The first factor is the number of vaccines that come does not match the cold storage capacity. This factor is caused by the uncertainty of vaccine arrival and delivery schedules from the Ministry of Health. As explained in the PESTLE analysis, in distributing the Covid-19 vaccine, PT XYZ is an extension of the ministry of health to distribute vaccines to each region. The procurement of vaccines and the number of vaccines that must be distributed are all regulated by the Ministry of Health. PT XYZ does not have the authority to regulate the procurement and distribution of vaccines. So often, the number of vaccines that come in can exceed the vaccines that come out, and this can cause the cold storage capacity to be overloaded.

The second factor is the longer delivery time due to the relocation policy. Different vaccination rates cause this factor among areas in Indonesia. The different vaccination rates are generated by pros and cons in society against vaccination program policies, halal and haram issues with certain Covid-19 vaccines, and various vaccination policies in each region. PT XYZ cannot stand alone to increase the speed of vaccination in every area. External factors strongly influence the problem of vaccination rates, so coordination is needed from every relevant institution starting from the Ministry of Health, PT XYZ, health offices in each region, regional leaders, health workers, and community leaders in each area.

The third factor is employee workloads that are too large, and the distribution of the covid-19 vaccine, which is very dynamic, can change at any time. Based on the result from the quality assurance division regarding the complaint report, three main problems led to the temperature excursion in the Covid-19 vaccine: human errors, coolant material selection, and relocation policy. Based on the interview and discussion with the staff of distribution division the excessive workload and the dynamic movement of vaccines during the Covid-19 pandemic made the level of human error relatively high, especially to maintain the quality of the vaccine, a high level of accuracy was required. Although PT XYZ already added several additional workers to reduce workload, they were only provided with one training initially, resulting in a lack of concern about their work.

The fourth factor is that PT XYZ has not used PCM as a substitute for Dry Ice according to the latest WHO standards. According to WHO Guidance, dry ice is regulated as a “dangerous good” by the International Air Transport Authority (IATA). The use of dry ice for vaccine delivery will be limited by WHO and will gradually be replaced with safer materials, namely Phase Changing Material (PCM), until 2023. PT XYZ has not used PCM as a substitute for dry ice because WHO's policy has just published at the end of 2021. So that PT XYZ needs research and preparation in advance to replace dry ice with PCM. In addition, the price of PCM itself is pretty high compared to dry ice. Although it has a higher price than dry ice, PCM has more advantages and is more stable. In Indonesia, few vendors sell PCM as coolant material for vaccines. Almost all pharmaceutical companies in Indonesia distributing vaccines have not used PCM as a coolant material unless there is a request from the customer to use PCM.

The last factor is the different perceptions between regions regarding temperature excursions. Some health workers in the areas have different perceptions of temperature excursion cases due to a lack of knowledge about WHO standards related to temperature excursions. According to WHO standards, vaccines that should be stored at -20°C can last for 30 days at 2-8°C. The vaccine can survive if the vaccine refrigerator is placed close to the evaporators. The temperature tolerance limit based on WHO for Covid-19 vaccine storage is at a temperature of 2-8 °C but in some cases, the temperature tolerance limit is at 2-30 °C with a note that it should not exceed 48 hours so that the quality of the vaccine can be maintained. PT XYZ itself already has guidelines. Suppose the vaccine is exposed to a temperature excursion of fewer than 12 hours. In that case, the quality of the vaccine is still

in good condition, while for a vaccine that is exposed to a temperature excursion of more than 12 hours, further examination is required. For vaccines exposed to a temperature excursion of more than 48 hours, the vaccine must be replaced with a new one.

B. Alternative Solution

PT XYZ can have power only on the controllable factor such as high workloads, the use of coolant material that does not meet the latest WHO standards, and differences in perception between regions regarding temperature excursions. Table 2 shows the BCOR framework for each alternative solution for temperature excursion at PT XYZ.

Table 2. BCOR Framework for each alternative solution

No.	Root Cause	Impact	Recommended Solution	Benefit	Cost	Opportunity	Risk
1.	Employee workloads that are too large and the distribution of the covid-19 vaccine which is very dynamic so that it can change at any time	Temperature Excursion	Implementing E-Monitoring and Internet of Things (IoT)	Reduce human error, high accuracy, and automated	Initial capital investment and maintenance cost	Data integration	System error and security issues
			Add Additional Workers	Reduce workloads	HRD development cost and salary	No need to recruit employees in the near future	Less accuracy and idle staff when the pandemic covid-19 is over
2.	Bio Farma has not used PCM as a substitute for Dry Ice in accordance with the latest WHO standards	Temperature Excursion	Feasibility study of changing coolant material from dry ice to PCM according to the latest WHO standards	More stable, improve the quality of cold storage and meet the latest WHO standards	Initial capital investment	Increase the number of customers who require shipments using PCM	Not many vendors provide PCM, especially for temperatures below -70 C
3.	Differences in perception between regions regarding temperature excursions	Temperature Excursion	Implementing Blockchain-based solution for Covid-19 vaccine distribution	Data integration, more accessible, more traceability, and safer	Initial capital investment	Data integration between each health institution and patient	Legal issues
			Implementing and integrating the Internet of Thing (IoT)	Data integration, high accuracy, and automated	Initial capital investment	Data integration and Artificial Intelligence	System error and security issues

C. Implementing E-Monitoring and IoT

PT XYZ needs to integrate the Internet of Things (IoT) in the form of sensors on products with E-Monitoring in an application to reduce the human error factor that caused by high workload. To create integrated data from temperature sensors in containers and refrigerated vehicles, IoT is needed in smart containers for the Covid-19 vaccine. Smart containers have basic information such as container number, start time, manufacturer, distributor, vaccination centre, and container content, which will be directly linked to the PT XYZ application data (Figure 3). Sensors in smart containers include temperature sensors and light sensors, and when the container is opened. The sensor will immediately detect something wrong and send data to the XYZ application. The last feature is tracking status, where the location of the vaccine container can be seen directly through the XYZ application with the help of GPS. Each smart container is equipped with a unique QR Code directly connected to the XYZ application.

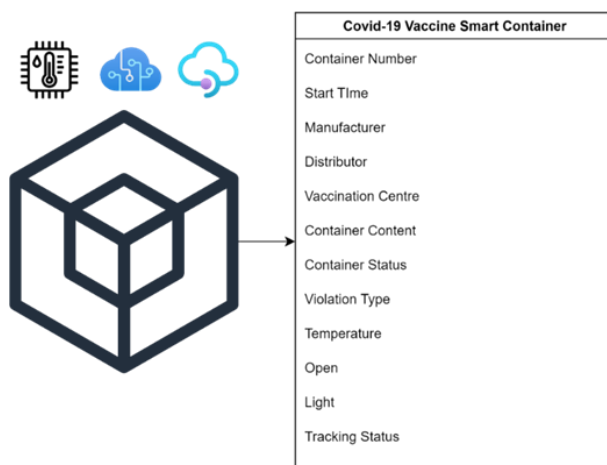


Figure 3. Covid-19 Vaccine Smart Containers

Vaccine distribution has become a critical aspect with the advent of multiple viable vaccinations worldwide. Smart vehicle solutions could provide much-needed services while adhering to healthcare guidelines. The smart refrigerated vehicle is designed automatically to maintain the temperature based on WHO recommendations to maintain vaccine quality during the distribution process (Figure 4). Smart vehicles are directly connected to the XYZ application to be tracked and monitored easily. PT XYZ needs a platform that can integrate all matters related to distribution (Figure 5).

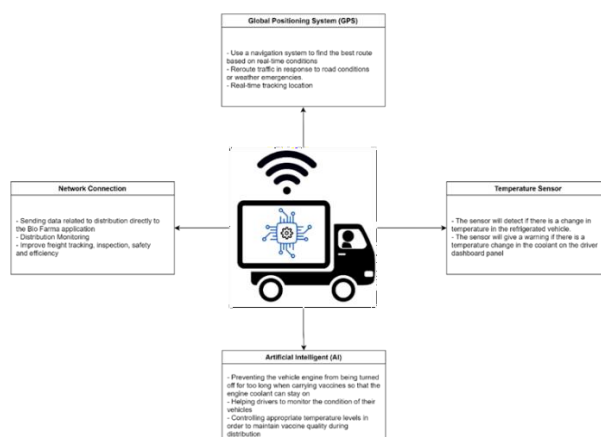


Figure 4. Smart Vehicle Features Prototype

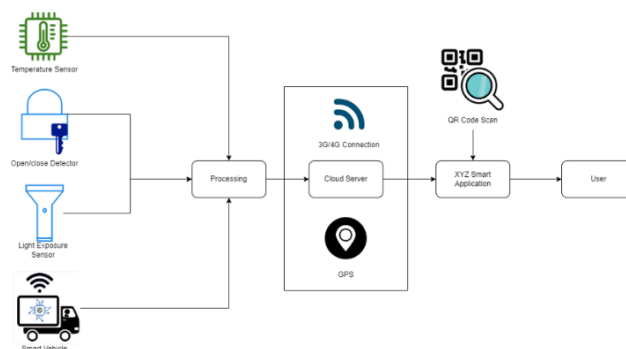


Figure 5. Smart Covid-19 Distribution Architecture

D. Add Additional Workers

Based on the interviews conducted, there are 72 employees in the distribution division of PT XYZ, including additional workers. Although additional workers have been added so that the total number of employees in the distribution division is due to the number of vaccines distributed per day reaching 2 million doses, the number of workers is not sufficient, so some workers are overworked. In the distribution division of PT XYZ, 3 employees focus on packing vaccines and warehouses. Table 3 below shows the data gathered from the PT XYZ distribution division.

Table 3. Data Gathered from Observation

Packaging Vaccine		
Number of Warehouse Staff	3	People
Working Days	5	Days
1 Shift	7	Hours
2 Shift	14	Hours
Distribution of vaccine per day	2.000.000	Doses
Average vaccine distribution per hour	142.857	Doses
Vaccine distribution per staff per hour	47.619	Doses
Average doses in box	1.618	Doses
Amount of box per staff per hour	29	Box
Packaging time per box	3	Minutes

Based on available data, to find the average utilization of the staff below is the formula used to get the most efficient number of staff:

$$\text{The average utilization of staff: } \rho = \frac{\lambda}{\mu}$$

There will be two scenarios. The first scenario is the actual number of warehouse staff in the distribution division PT XYZ. In the first scenario, there are only three staff to package the vaccine. In the second scenario, two additional staff will be added, so the total number of staff is five. The staff's workload can be calculated using the average utilization of the staffing formula above. The result can be seen in Table 4 and Table 5 below.

Table 4. The First Vaccine Packaging Scenario

Vaccine Packaging Queue		
Arrival rate	29	Box/hour
Service rate	20	Box/hour
Number of Staff	3	People
The average utilization of staff	147%	

Table 4 above shows the result of excel add-ins from the first scenario with three staff. The utilization of the first scenario is very high, over 100%. The result means that the staff is working more than the workload, which can trigger human errors during the vaccine packaging process.

Table 5. The Second Vaccine Packaging Scenario

Vaccine Packaging Queue		
Arrival rate	18	Box/hour
Service rate	20	Box/hour
Number of Staff	5	People
Vaccine distribution per staff per hour	28.571	Doses
The average utilization of staff	88%	

Table 5 above shows the result of the second scenario with five staff. Although staff utilization from the second scenario is still relatively high, it has a more reasonable workload than the first scenario. With a lighter workload than the first scenario, it is expected to reduce human error while improving the quality of the vaccines to be distributed. Therefore, PT XYZ should add two additional staff in the distribution division, mainly focusing on packaging vaccines and warehouses.

E. Changing Coolant Material from Dry Ice to PCM

PT XYZ needs to change the use of dry ice to PCM to meet the latest standards from WHO on maintaining vaccine quality during the distribution process. Although the latest WHO regulations must replace the use of dry ice for PCM, WHO has given until 2023 for pharmaceutical companies to adapt to the latest policies. Phase change materials (PCM) are compounds that absorb and release thermal energy during the melting and freezing processes. PCMs are one of the most efficient ways of storing thermal energy. PCMs can be used for energy storage and temperature control (Pudjiastuti, 2011). More than 88 materials can be used as PCM, but there are still not many materials that can reach temperatures below -70°C. Based on data from UCLA University in 2013, PCM that can maintain temperatures below 0°C mostly comes from eutectic PCM (Young, Thiele, Fujii, Sant, & Pilon, 2013). So far, the company that can provide PCM with temperatures below 0°C with the most variations is PlusICE.

PCM as a coolant material requires special containers such as Arktek or special ULTPCM, which can maintain ultra-low temperatures (WHO, 2021). Table 6 below shows the results of the analysis of the initial budget estimate for using PCM as a coolant material for vaccine distribution.

Table 6. Estimated Budget Plan for PCM

Data Gathered by Observation			Estimated Budget Plan		
Arktek	5.000	USD	Arktek	3.335.000	USD
PlusICE E-78	150	USD	PlusICE E-78	800.400	USD
1 Arktek	8	PCM	Total Budget	4.135.400	USD
1 Arktek	300	Vials Vaccine			
1 Vials Covid-19 Bio Farma	10	Doses			
1 Arktek	3.000	Doses			
1 Day	2.000.000	Doses			
1 Day	667	Arktek			
1 Day	5.336	PlusICE E-78			

From the observation data, it can be seen that the initial budget estimate that PT XYZ must prepare to replace dry ice with PCM is \$4,135,400 or around 60 billion rupiah. The purchase of 667 Arktek is a long-term investment. PT XYZ has a financial advantage over its competitors as a state-owned company. The use of PCM for vaccine distribution can be realized because of the great benefits and WHO's latest regulations. The newest rule from WHO, which requires all dry ice to be replaced with PCM, makes PCM a type of investment that has great value in the future.

F. Implementing Blockchain-Based Solution for Covid-19 Vaccine Distribution

PT XYZ needs to implement blockchain to integrate the data, information and IoT in every stakeholder when distributing the Covid-19 vaccines. The blockchain is a decentralized digital ledger that preserves information and makes it nearly hard to alter previously published content (Kamenivskyy, Palisetti, Hamze, & Saberi, 2022). Blockchain implementation has advantages in security, transparency, traceability, and stability (Antal, 2021; Longo, 2019). The blockchain used to solve the distribution vaccine problem has a framework with several layers. Each layer defines how blockchain will interact with different physical components or users (Figure 6).

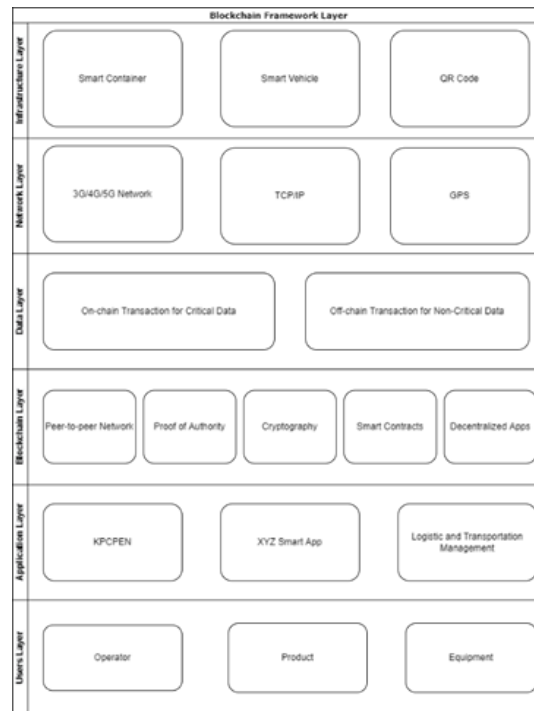


Figure 6. Blockchain Framework Layer for Vaccine Distribution

The first layer is the infrastructure layer that defines the set of IoT sensors to monitor the status of supply chain logistics. The infrastructure layer consists of smart containers, smart vehicles, and QR codes. The smart containers can safely detect and digitize data from the vaccine inside, regulate the temperature inside the container to keep it appropriate and reduce the possibility of vaccine damage during the distribution process. The smart vehicle will automatically control the coolant temperature of the truck to keep it at the ideal temperature and send the location in real-time during the distribution process. The QR code component is required to deal with the counterfeit vaccines issue and contains detailed information about each smart container.

The second layer is the network layer consisting of a 3G/4G/5G network, TCP/IP, and GPS. Those networks transmit the data and information gathered by the infrastructure layer to the blockchain. The 3G/4G/5G network connects the smart containers and smart vehicles to the blockchain, guaranteeing that essential temperature data is published to the blockchain even in a power outage or when the vials are transferred from the manufacturer to the distributor or vaccination facility. TCP/IP will be utilized to connect the computer devices of participating distribution chain stakeholders to the blockchain network and allow them to upload information to it. GPS is used to transmit smart vehicle location data, estimated travel time, traffic conditions, and the fastest route taken in real-time.

The third layer is the data layer consisting of a hybrid chain that determines some parts processed and stored on-chain and other parts off-chain. Critical data such as temperature violations, light violations, open violations, registered members, and delivery events are stored securely on-chain. On the other hand, non-critical and large-sized data is stored off-chain.

The fourth layer is the blockchain, which acts as the core and general ledger. The blockchain layer manages and dictates what comprises the block within the blockchain, how the system will verify the new block's legitimacy, aggregate data on the distributed ledger, access permissions for the blockchain, and how those permitted will interact with the blockchain. The peer-to-peer network is chosen at this layer because it allows users to share, search and download files with each other within the same scope. The consensus used in this layer is proof of authority (PoA) which relies on known and reputable validators to produce blocks and thus, provide computational power to a network. Validators run software allowing them to put transactions in

blocks. The process is automated and does not require validators to monitor their computers constantly. Proof of authority provides a more efficient data verification mechanism than proof of work or proof of stake.

The blockchain layer also consists of cryptography, smart contracts, and decentralized applications. Using cryptography to assure the immutability of records. These records will be readily available via mobile or web-based user interface. Smart contracts are digitally stored on a blockchain, automatically executed when predetermined terms and conditions are met. As soon as a condition is met, the contract is immediately executed. Because smart contracts are digital and automated, there is no paperwork to handle and no time spent correcting errors that frequently occur from manually filling out documentation.

The interactions between the smart container and smart vehicle cold storage system and the blockchain will be governed by smart contracts. The mishandling and counterfeit vaccination distribution issues will also be handled using smart contracts that demand authorized user signatures and distribution chain procedures.

The fifth layer is the application layer consisting of KPCPEN, PT XYZ smart app, logistics, and transportation management. KPCPEN is a committee formed by the government for economic recovery and overcoming the 2019 coronavirus disease and the Covid-19 pandemic in Indonesia. So far, KPCPEN has obtained various data and information that provide solutions to resolve the Covid-19 pandemic. Integrating KPCPEN into the blockchain is necessary to provide a solution. PT XYZ Smart App is a multifunctional application that contains data from smart containers, smart vehicles, and QR codes. Logistic and transportation management is needed to help track the batches in route and ensure that the inventory data is visible on the blockchain upon their arrival. This layer will aid in the resolution of some communication issues and the creation of a decentralized real-time uniform distribution chain database for all parties.

The sixth layer is the user's layer consisting of the operator, product, and equipment. This layer defines how the three-component in the blockchain interact with the system. The operator represents each participating stakeholder's authority. This authorization validation aids in preventing illegal or fraudulent data from being published to the chain. The product interaction rules determine the one-to-one relationship between each QR code and each vial, the number of vials in each shipment, and the volume of batches in each shipment. The equipment interacts with published data from the smart containers and smart vehicles to the blockchain. Distribution chain difficulties can be solved with the help of these components, which help define what information each network participant contributes to the system. These elements serve to determine what data each network participant will offer to the system, thereby playing a role in solving all distribution chain issues. Figure 7 below shows the architecture of the blockchain-based system for Covid-19 vaccine distribution.

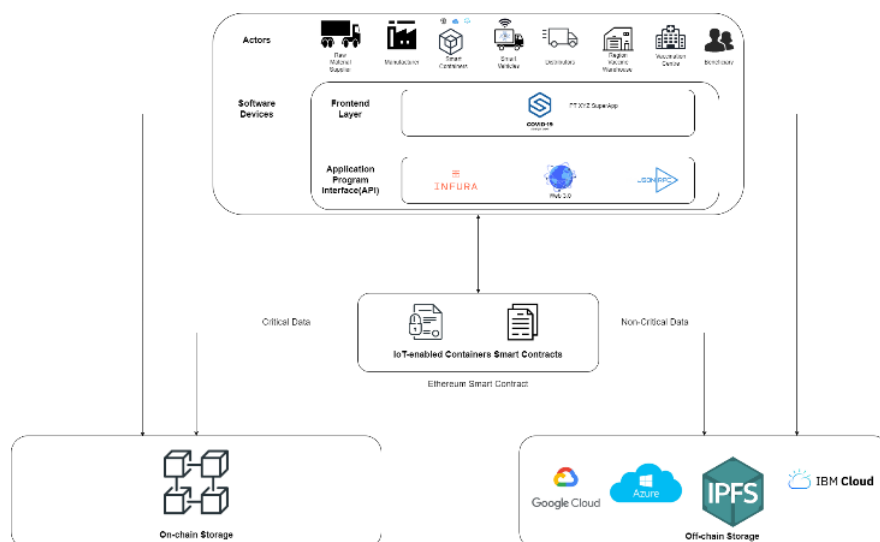


Figure 7. The Architecture of The Blockchain-Based System for Covid-19 Vaccine Distribution

The actors will use Decentralized Applications (DApps) to access smart contract registration, traceability, and violations. In addition, they have access to both off-chain and on-chain storage options. Devices connecting to DApps through an Application Programming Interface (API) will be required to link with smart contracts. APIs such as Infura, JSON RPC, and Web3 are available. The designated actor can execute only pre-authorized functions in a smart contract where each actor has limited access to smart contract capabilities. Data that is too vast to be stored on-chain and that is not crucial to the delivery process is handled by off-chain storage. Vaccines for Covid-19 are monitored in real-time while being transported to vaccination centres by system components to ensure that they are supplied to beneficiaries in excellent condition. Furthermore, the vaccine's origin can be verified by DApp users.

Implementing a blockchain-based solution is a development of integrating IoT with a better level of security and transparency. Blockchain-based solutions require IoT in the form of existing sensors. So the best long-term solution for the supply chain is blockchain implementation.

G. Implementing and Integrating Internet of Things (IoT)

Integrating the Internet of Things (IoT) means combining new IoT devices, data, and platforms with existing IT assets (such as business applications and legacy data, mobile, and SaaS) to implement complete IoT business solutions. IoT integration means integrating existing IT assets with new IoT devices, data, and platforms with existing mobile and SaaS to implement complete IoT business solutions. In contrast to the blockchain, which gives every user the same authority, integrating IoT requires a particular server with a large capacity to accommodate all data and information received. All data and information will be processed centrally on the server.

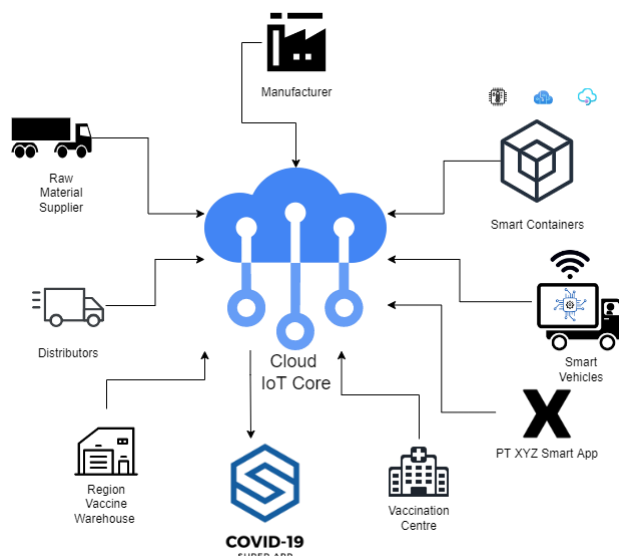


Figure 8. Integrating IoT with Cloud Computing

Figure 8 above shows an IoT integration model with a cloud server as the core. All sensors from the early stages of vaccine manufacture to vaccination centres will automatically send data to a cloud server where stakeholders and the public can find its contents through a unique application called Covid-19 SuperApp. All data collected from all IoT sensors about Covid-19 will be easily accessible in the Covid-19 SuperApp. The SuperApp has two login authorizations, namely for stakeholders and the public. Integration of IoT will help solve problems and challenges related to Covid-19 vaccine distribution.

Result and Discussion

A. The Best Alternative Solution for The First Root Cause

The implementation of IoT and the addition of workers each have advantages and disadvantages. The advantages and disadvantages of each alternative solution are summarized in Table 7.

Table 7. Advantages and Disadvantages of Alternative Solution for The First Root Cause

	Advantages	Disadvantages
Implementing E-Monitoring and IoT	<ul style="list-style-type: none"> • More accurate and faster because it uses sensors • Automated • More transparent • Easy data transfer • Access from anywhere at anytime • Early warning system • Reduce human error • Saving time • Ability to predict and act • Long term investment 	<ul style="list-style-type: none"> • High initial investment cost • Vulnerable to attacks in cyberspace • System error • Maintenance cost • Security issue • Takes time to implement
Add Additional Workers	<ul style="list-style-type: none"> • Open job opportunities • Improving the competitiveness of the company's human resources • Can solve problems in the short term 	<ul style="list-style-type: none"> • Employee recruitment costs • New employees need time to adapt • Employee salary • Manual • Possibility of human error





Furthermore, the advantages and disadvantages of each alternative solution were presented to the staff of the distribution division to consider the best alternative scenario of the first root cause. Adding additional workers is the fastest solution that can be taken to reduce the workload of existing employees and reduce the risk of temperature excursions. Implementing E-Monitoring

and IoT has the advantage that vaccine monitoring will be automated. This solution will reduce human error and reduce the risk of temperature excursions. However, the solution to add additional workers is short-term, while the solution to implementing E-Monitoring and IoT is an investment and a solution for the long term. The best solution to the first root cause is the Implementation of E-Monitoring and IoT in the distribution of vaccines.

B. The Best Alternative Solution for The Second Root Cause

The only solution to the second root cause is to change the use of dry ice to PCM according to the latest WHO standards. Based on the results of publications published by WHO in collaboration with UNICEF, the advantages and disadvantages of PCM and dry ice are shown in Table 8 below (WHO, 2021).

Table 8. Advantages and Disadvantages of PCM and Dry Ice

INSULATED CONTAINER	COOLANT	ADVANTAGES	DISADVANTAGES
<p>Arktek (YBC-5E)</p>  <p>© WHO HQ/WHO</p>	<p>Special ULT PCM</p>  <p>© WHO HQ/WHO</p>	<ul style="list-style-type: none"> Durable material, with vial rack system For use with PCM packs Large capacity range: 5 L to 10 L Built-in temperature logger Cold life up to 5 days, with multiple opening Reusable PCMs 	<ul style="list-style-type: none"> High initial investment cost Relatively bulk When used with PCM: <ul style="list-style-type: none"> pre-freezing of PCMs separate ULT freezer required Protective clothing/equipment: long-sleeve shirt or insulated gloves to avoid frostbite when handling conditioned Arktek
<p>Thermal shipper for dry ice</p>  <p>© WHO HQ/WHO</p>	<p>Dry ice only</p>  <p>© WHO/Mark Neuseendorf</p>	<ul style="list-style-type: none"> No initial investment Usually comes with temperature logger Large capacity range: 3.4 L to 6.2 L May come with vial rack system Cold life: product specific; on average 5 days with two openings/day, extended with consistent re-icing Reusable dry ice 	<ul style="list-style-type: none"> Prone to wear and tear Use with dry ice only for ULT Consistent re-icing to maintain ULT never allow dry ice to be depleted.

C. The Best Alternative Solution for The Third Root Cause

Table 9. Advantages and Disadvantages of Alternative Solution for The Third Root Cause

	Advantages	Disadvantages
Blockchain-based Solution	<ul style="list-style-type: none"> Decentralized network More transparent system Trusty chain Unalterable Indestructible technology Practically no errors Low costs for users Better data security Better audits More efficient transactions More flexible data storage Traceability, Immutability, Stability 	<ul style="list-style-type: none"> High implementation costs Unemployment Not environmentally friendly There is no clear regulation from the government Scalability Immaturity
Integrating Internet of Things (IoT)	<ul style="list-style-type: none"> Automated Easy data transfer Lower cost than blockchain Environmental friendly 	<ul style="list-style-type: none"> High initial investment cost Vulnerable to attacks in cyberspace System error Maintenance cost Security issue Requires strong coordination

The implementation of blockchain and IoT integration to solve the Covid-19 vaccine distribution problem is a solution and a long-term investment because both solutions take time to be realized. The advantages and disadvantages of each alternative solution are summarized in Table 8.

Blockchain implementation has advantages in security, transparency, traceability, and stability compared to IoT integration. However, on the other hand, blockchain is a new technology that is still in the development stage, so there is no law governing the blockchain. Blockchain implementation is much more expensive than integration IoT because it is a new technology. Implementing a blockchain-based solution is a development of integrating IoT with a better level of security and transparency. Blockchain-based solutions require IoT in the form of existing sensors. So, the best long-term solution for the supply chain is blockchain implementation.

Conclusion

After conducting an analysis, researchers found the appropriate methods and strategies that is expected to help PT XYZ reduce the incidence of temperature excursions during the distribution of the Covid-19 vaccine. The following are conclusions from the best solution chosen in this study:

1. Phase 1 - Propose replacement of dry ice to PCM following the latest WHO standards. PCM use with Arktek containers is more stable and durable than dry ice as coolant material. This solution will help reduce the temperature excursion rate during the delivery of the Covid-19 vaccine in Indonesia, which is a tropical country with many islands.
2. Phase 2 - Propose E-Monitoring and IoT in smart containers, smart vehicles, and smart XYZ applications. The implementation of E-Monitoring and IoT will make work automated to reduce employees' workload and reduce the level of human error.
3. Phase 3 – Propose a blockchain-based solution for Covid-19 vaccine distribution. Blockchain implementation will expand the scope of integration between stakeholders, starting from the vaccine manufacturing process from raw material suppliers until the beneficiaries receive the vaccine. Implementing a blockchain-based solution is a development of integrating IoT with a better level of security and transparency.

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What variables are the determining factors in the continuity of entrepreneurship in tourism?

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Abstract : Entrepreneurship in tourism is currently a special concern of the state. This is because tourism has the potential to contribute to the economy. In line with that, research in the field of tourism needs to be carried out. This research uses Publish or Perish and Vosviewer. The purpose of this study is to find variables that have been discussed and research that is still rarely done. This study found that research related to government is rarely done. Two variables were found that are important for further research, namely the major government tourist and the largest tourist company. Therefore, it needs to be further developed.

Keyword: Entrepreneurship in tourism, PoP, Vosviewer, Government Policy,

Literature Review

The tourism industry with tourism is a variety of tourism activities that are supported by various service facilities provided by the community, entrepreneurs, government and local governments. In the study of the sociology of tourism, the interest of tourists in a natural destination is determined by extrinsic factors, namely external factors attached to natural tourist destinations (Pintana, 2009). One of the extrinsic factors is attraction, or often called tourist attraction. Tourist attraction is anything that is interesting and worth visiting and seeing (Pendit, 2002).

The profitability of a small tourism business depends on human capital, especially the skills of the entrepreneur who runs the business. Managerial skills are critical to business success, the main objective of an advisory incubator should be to promote managerial competence (Lerner & Haber, 2001) (Ledhem & Moussaoui, 2021). Tourism has an important role in increasing the level of entrepreneurship in developing countries (Subramaniam & Masron, 2021)

The importance of tourism in every country that has the potential to develop tourism. This is because tourism has a dual role or benefit (multiplier effect) for all development sectors. Tourism provides a multiplier effect that is beneficial for the regional economy and the welfare of the local population.

Tourism not only supplies the necessary funds to finance company operations, but also provides a stimulus to the productivity of local companies and creates new job opportunities that improve the welfare of the country. Variables that have an important influence on tourism activities, such as entrepreneurship and price considerations (Nissan, Galindo, & Mendez, 2011). Entrepreneurship in the tourism industry benefits from the initiatives launched by the Egyptian government. Entrepreneurship makes a positive contribution to the

development of the tourism industry in a country (Mahmoud, Shouk, & Fawzy, 2019) (Hallak, Assaker, & Lee, 2013).

Many studies have been carried out to develop tourism. In this study, it will be explained what research variables have been or are often discussed and also what other tourism variables still need to be researched.

Methods

Research data were collected from the Google Scholar citation web page using Publish or Perish software. The data is a citation on entrepreneurship in tourism from various types of documents, such as journal articles and books. Initial search results through the PoP application are limited to only 1000 bibliographic entries or one search literature. However, out of 1000 there are only 229 that can be used related to entrepreneurship in tourism. Bibliometric studies are carried out to expand the scale of knowledge in this field and will contribute to future research (Maya, Noermijati, Rofiaty, & Rofiq, 2020)

Tabel 1. Database searching

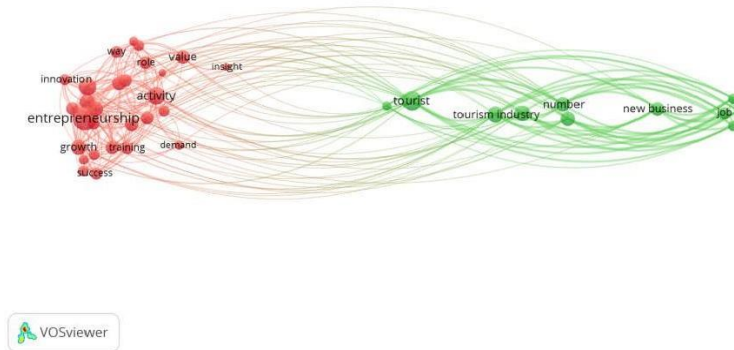
Initial Entrepreneurship in tourism	570
Zero cites	270
No publisher	41
Final Result	229

Findings

The results of document extraction through the Publish or Perish software found 570 studies from 1976 to 2021. Then the researchers removed research data that had zero citations. So that the research obtained from 1980 to 2021 there were 300 studies. Then the researcher sorts the research documents that do not have the publisher's name. The research data obtained were 229 from 1980 to 2021.

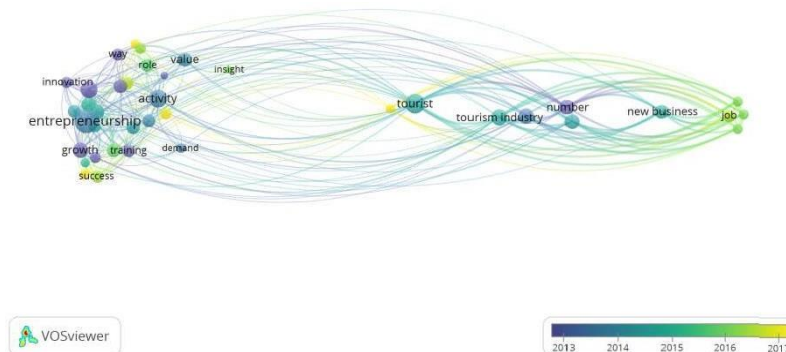
Research discussing entrepreneurship in tourism and business from 1980 to 2021 consisted of 229 studies. Looking at the words related to the tourism industry, when viewed from pictures related to the tourism industry, it is certainly related to tourism, new business, operations, growth, entrepreneurship, value. Tourist and tourism industry appear together from 229 available.

Figure 1. Network Visualization



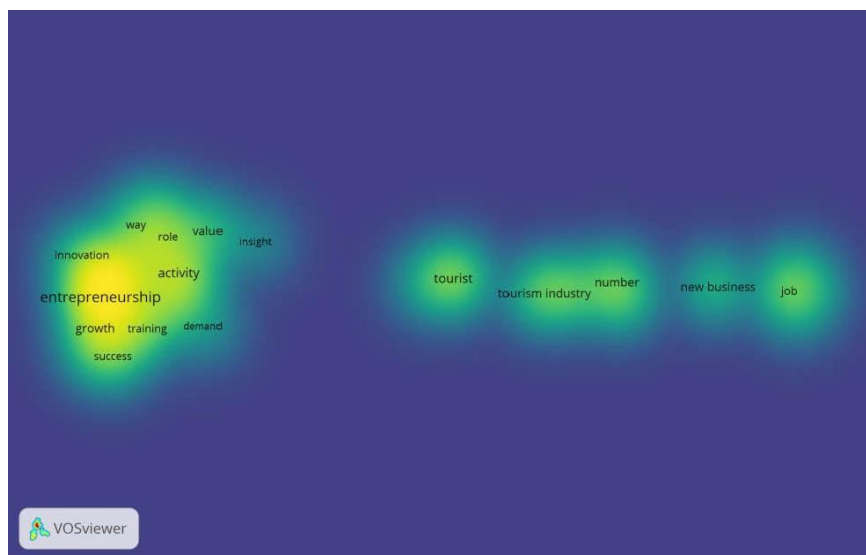
From the word or term tourism when analyzed, 39 items appear consisting of 2 clusters and there are 289 links, a total of 776 links. In Vosviewer there are 2 clusters, meaning that research on tourism when visualized is divided into 2 clusters, namely the red cluster and the green cluster.

Figure 2. Overlay Visualization



The overlay visualization shows the year of publication, which is the year to the right of the youngest (2017) and to the left of the oldest year (2013). The tourism industry began to be researched from 2013 to 2017.

Figure 3. Density Visualization



In Density Visualization, the topic of Entrepreneurship becomes the center of attention in research because the writing is clear and large. Meanwhile, major government tourist and largest tourist company are topics that are rarely studied because of the faded writings of the 229 existing studies.

Conclusion

Existing research on entrepreneurship in tourism still needs to be explored again. Especially those related to the role of government or government policies. Because this certainly has a positive impact on the progress of existing tourism. Government policies to improve Indonesia's economic development by increasing the productivity of human resources in the tourism industry (Murniati, Maski, Noor, & Ekawaty, 2021). The government's attention in tourism by making regulations on tourism will make tourism sustainability. In this study, two variables were found that are important for further research, namely the major government tourist and the largest tourist company.

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STOCK OBSERVATION ANALYSIS OF PT. MAYORA INDAH TBK AFTER THE EXPOSURE OF MAYORA'S PRODUCT PHOTOS WITH ELON MUSK ON SOCIAL MEDIA

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Abstract: The increase or decrease in stock prices in the capital market certainly has a huge impact on investors. Stock price fluctuations are influenced by the level of demand and supply of stock prices from investors. The increase in the share price of PT. Mayora Indah Tbk (MYOR) at the time of the interaction between the Government of Indonesia and Elon Musk attracted attention for further follow-up. Quoting from the disclosure of information on the Indonesia Stock Exchange (IDX), MYOR is one of the issuers engaged in the consumer goods industry that seeks to improve all means to achieve the best results for the benefit of all workers, consumers and shareholders. This type of research is a method of data analysis or stock price observation. Data analysis or observation research is to describe the situation or event of an increase in MYOR's stock price.

Keywords: Mayora, Stock price, Signalling Theory, Social Media

Introduction

The development of information technology that occurs makes competition in the business world increasingly tight. This requires a company to be able to compete globally. To be able to compete in the global market, companies must have adequate capabilities and influence. For this reason, a company should spread its influence globally by directly or indirectly contributing to the company.

The increase or decrease in stock prices in the capital market certainly has a very large effect for investors. Fluctuating stock prices are influenced by the level of demand and supply of stock prices from investors. A high stock price can indicate that the company has a high demand for shares, on the other hand, when the stock price falls, the demand level is low (Malini, H., 2020).

In 2017, Kopiko product from PT Mayora Tbk (MYOR) received great attention for the global market because it was widely reported that NASA astronauts liked to consume Kopiko candy. Even when flying out of space, they carry the candy with them. This is evidenced by the sight of a packet of kopiko candy among the supplies of the NASA crew. This candy with extra coffee native to Indonesia is also photographed from outer space.

Recently, the Kopiko product from MYOR has also received great attention because of the news about the meeting between Luhut Panjaitan and Elon Musk, and at the end of the meeting Luhut Panjaitan asked Elon Musk to taste Kopiko candy and apparently Elon Musk liked this product and immediately brandished two thumbs up.

Quoting from the disclosure of information on the Indonesia Stock Exchange (IDX), MYOR is one of the issuers engaged in the consumer goods industry that seeks to improve all means to achieve the best results for the benefit of all workers, consumers and shareholders.

Kopiko has been known in more than 100 countries, for example Korea. This is evidenced by the appearance of kopiko in three Korean drama titles, namely Vincenzo, Mine, and Hometown Cha Cha Cha.

The increase in the share price of PT. Mayora Indah Tbk (MYOR) when the impact of the meeting between the Government of Indonesia and Elon Musk attracted attention for further research. Based on the above background, the authors take the title of the study, "Stock observation analysis of PT. Mayora Indah Tbk after the exposure of Mayora's product photos with Elon Musk on Social Media".

Literature Review

Definition of stock

Shares can be interpreted as a sign of a person's or party's capital participation (business entity) in a company or limited liability company. According to the Big Indonesian Dictionary (KBBI), Shares have the meaning of "the rights that people (shareholders) have over a company due to the surrender of a share of capital so that it is considered a share in ownership and supervision". By including this capital, the party has a claim (right) on the company's income, company assets, and is entitled to attend the General Meeting of Shareholders (GMS). In the secondary market (exchange) or in daily stock trading activities, stock prices fluctuate either in the form of increases or decreases. The formation of stock prices occurs because of the demand and supply of these shares.

Demand and supply for a product are influenced by many factors, both those that are specific in nature related to the stock (performance of the company and the industry in which the company is located) as well as macro or external factors, such as developments in interest rates, inflation, exchange rates, and other factors. Economic conditions such as social and political conditions. The form of shares is in the form of sheets of paper stating that those whose names are listed on the sheet are the legal owners of a company with a percentage in accordance with the value of the investment invested in the company.

Stock price

Shares are certificates that show proof of ownership of a company, and shareholders have a claim on the company's income and assets. The price of a share is strongly influenced by the law of supply and demand. The price of a stock will tend to rise if a stock is in excess demand and tends to fall if there is an excess supply.

Share price is the price on the real market, and is the easiest price to determine because it is the price of a stock in the ongoing market or if the market is closed, then the market price is the closing price (Azis, 2015). Stock prices can change up or down in a matter of time so quickly. Stock prices can change in minutes and can even

change in seconds (Darmadji & Fakhrudin, 2015). This is possible because the price that occur on the stock market at certain times are determined by market participants and are determined by the demand and supply of the relevant shares in the capital market (Jogiyanto, 2016).

According to Maurice Kendall, stock prices are unpredictable or have an uncertain pattern. It moves following a random walk, so investors must be satisfied with normal returns with the level of profit provided by the market mechanism. Abnormal returns are only possible if there is something wrong in the efficiency of the market, abnormal profits can only be obtained from unfair play.

Stock prices can change up or down in a very fast calculation, in just minutes, even in seconds. This condition is due to the large number of investor orders that are processed by floor traders into the Jakarta Automated Trading System (JATS). On the floor of the Indonesia Stock Exchange building, there are more than 400 computer terminals, which floor traders can use in processing orders received from investors.

The effect of rising and falling stock prices

In economic theory, the rise and fall of stock prices is something that is commonplace because it is driven by the forces of supply and demand. If the demand is high then the price will go up, otherwise if the supply is high the price will go down. In general, there are several factors that influence the rise and fall of a company's stock price. These factors are classified into internal factors and external factors. Internal factors are factors that arise from within the company.

Meanwhile, external factors are factors that come from outside the company. External Factors

1. Macroeconomic Fundamental Conditions

This factor has a direct impact on the rise and fall of stock prices, for example, the increase or decrease in interest rates caused by the policies of the Federal Reserve, the rise or fall of the Bank Indonesia (BI) benchmark interest rate and the value of exports and imports which have a direct impact on the exchange rate. Rupiah against the US dollar, the inflation rate is also one of the factors of macroeconomic conditions, high unemployment caused by security factors and political shocks also directly affect the increase or decrease in stock prices.

Apart from these factors, the relationship between banking interest rates and stock price movements is also very clear. When banking interest rates skyrocket, the price of shares traded on the exchange will tend to fall sharply. This can happen due to several possibilities: First, when banking interest rates rise, many investors shift their investment to banking instruments such as deposits. With the increase in interest rates, investors can reap more profits. Second, for companies, when banking interest rates rise, they will tend to minimize losses due to increased costs. This happens because most companies have debts to banks.

2. Fluctuations in Rupiah Exchange Rates Against Foreign Currencies

The strength of the rupiah exchange rate against foreign currencies is often the cause of the rise and fall of stock prices on the stock exchange. Logically, this makes a lot of sense. The consequences of exchange rate fluctuations can have a positive or negative impact on certain companies, especially those with foreign currency debt burdens.

Importing companies or companies that have a foreign currency debt burden will be harmed due to the weakening of the exchange rate. Because this will result in an increase in operating costs and will automatically result in a decrease in the price of the shares offered. For example, the weakening of the rupiah exchange rate against the US dollar often weakens stock prices in the Jakarta Composite Index (JCI).

3. Government Policy

Government policies can affect stock prices even though the policy is still in the discourse stage and has not yet been realized. There are many examples of government policies that cause stock price volatility, such as export-import policies, company policies, debt policies, foreign investment (PMA) policies, and so on.

4. Panic Factor

Certain news can trigger panic in one of the exchanges or stocks. This panic will demand investors to release (sell) their shares. Back to the law of supply and demand. This condition will cause selling pressure, so the stock price will fall. In the panic selling phenomenon, investors want to immediately release their shares regardless of the price, for fear that the price will fall further. This action is more triggered by emotions and fears rather than based on rational analysis. Avoid selling shares because you are carried away by panic. First, analyze the stock you want to sell, whether fundamentally the stock is still worth holding. Owning a good stock is like owning a small part of a good, bona fide company.

5. Market Manipulation Factor

The cause of stock price fluctuations can also be caused by market manipulation. Market manipulation is usually carried out by experienced investors and large capitals by using the mass media to manipulate certain conditions for their purposes, either lowering or increasing stock prices. This is often referred to as a rumour. But the cause by this factor usually will not last long. The company's fundamentals are reflected in the financial statements that will take control of the trend of its share price.

Internal factors

1. Company Fundamental Factors

The company's fundamental factors are the main factors that cause stock prices to rise or fall which must always be observed when investing in stocks. Stocks from companies that have good fundamentals will cause the stock price trend to rise. Meanwhile, shares of companies that have poor fundamentals will cause the stock price to trend down.

2. Corporate Corporate Action

The corporate action referred to here is in the form of policies taken by the company's management. The impact can change things that are fundamental in the company. Examples of corporate actions are acquisitions, mergers, rights issues, or divestments.

3. Projected Company Performance in the Future

The company's performance or performance is used as a reference for investors and fundamental analysts in conducting an assessment of the company's shares. Among several factors, the most highlighted are the level of cash dividends, the level of debt ratio, the ratio of book value/Price to Book Value (PBV), earnings per share (EPS), and the level of profit of a company.

Companies that offer a larger dividend payout ratio (DPR) tend to be favored by investors because they can provide good returns. In practice, the DPR has an

impact on stock prices. In addition, EPS also contributes to changes in stock prices. High EPS encourages investors to buy these shares which causes the stock price to be higher.

The level of debt ratio and PBV also has a significant effect on stock prices. Companies that have a high debt ratio are usually growing companies. The company will usually be aggressive in seeking funding from investors. However, companies like this are usually also in great demand by investors. Because if the results of the analysis are good, the stock will provide high returns because in the future its market capitalization can increase.

Signaling Theory

Signal theory (signaling theory) was first put forward by Spence (1973) which explains that the sending party (the owner of the information) gives a signal or signal in the form of information that reflects the condition of a company that is beneficial to the recipient (investor). Brigham and Houston (2015) state that signal theory provides an illustration that a signal or cue is an action taken by company management that provides instructions for investors about how management views company prospects. This theory reveals that investors can distinguish between companies that have high values and companies that have low values.

Brigham and Houston (2014: 186) explain that signals are instructions given by the company related to management actions in the company's project appraisal efforts. The main focus of signal theory is to communicate actions taken by internal companies that cannot be directly observed by parties outside the company. This information can be useful for outsiders, especially investors when they are able to capture and interpret the signal as a positive signal or a negative signal.

The value of the company can be referred to as the perception of investors or the general public towards the company which is often associated with stock prices. The value of the company can certainly show the state of the stock market for the company, the company's ability to obtain capital will increase if the company has a good reputation as reflected in its financial statements. The greater the value of the company, it can show the public in assessing the market price of the company's shares above its book value.

Information is an important element for investors and business people because information essentially presents information, notes or descriptions for past, current and future conditions for the survival of a company and how the securities market will be. Complete, relevant, accurate and timely information is needed by investors in the capital market as an analytical tool for making investment decisions. An information published as an announcement will provide a signal for investors in making investment decisions.

If the announcement contains a positive value, it is expected that the market will react when the announcement is received by the market. When the information is announced and all market participants have received the information, market participants first interpret and analyze the information as a good signal (good news) or a bad signal (bad news). If the announcement of the information is a good signal for investors, there will be a change in the volume of stock trading.

Signal theory develops a model in which the capital structure can be a signal that is conveyed by managers to the market. If the manager has confidence that the company's prospects are good and therefore want the stock price to increase, he will communicate this to investors by saying directly that our company has good prospects (Hanafi, 2015). Signal theory emphasizes that the information issued by the company is an important signal for an investor in making a decision to invest. Information published as an announcement will provide a signal for investors in making investment decisions. When information is announced, market participants first interpret and analyze the information as a good signal (good news) or a bad signal (bad news) (Jogiyanto, 2016; Darma, 2018; Darma, 2019).

Mayora

PT MAYORA INDAH Tbk., or commonly known as Mayora, is an Indonesian company that produces food and beverages. PT MAYORA INDAH Tbk itself was officially established on February 17, 1977, with its first factory located in Tangerang. Mayora's first product is called Roti Marie, which has been on sale since 1948 and was produced in-house by the pioneers of the first generation.

One of the most famous brands produced by Mayora is Kopiko, which was first launched in 1982. Now, Mayora's expansion has reached world class, with markets located in various countries in Asia, Australia, Africa, Europe, and America. Mayora is also known as the largest coffee candy manufacturing company in the world thanks to the Kopiko brand.

The vision and mission of PT MAYORA INDAH Tbk are:

- 1) To become a quality and trusted food and beverage producer in the eyes of domestic and international consumers and dominate the largest market share in the category of similar products.
- 2) Able to obtain Operational Net Profit above the industry average and provide good added value for all stakeholders of the Company.
- 3) Can make a positive contribution to the environment and the country. Referring to the Articles of Association, one of the Company's business activities is the industrial sector. PT MAYORA INDAH Tbk classifies its products into 2 types of categories, namely processed foods and beverages, which include several types of products, including biscuits, candy or confectionery, wafers, and many more. Many of PT MAYORA INDAH Tbk's products are known as market leaders, or even products that are pioneers in their respective categories. Some examples are the Astor brand as the pioneer of wafer sticks, Beng-Beng as the pioneer of chocolate-coated caramel wafers, and Choki-Choki as the pioneer of chocolate pasta.

Social media

Van Dijk in Nasrullah (2015) states that social media is a media platform that focuses on the existence of users who facilitate them in their activities and collaboration. Therefore, social media can be seen as an online medium (facilitator) that strengthens the relationship between users as well as a social bond. Meike and Young in Nasrullah (2015) define the word social media as a convergence between personal communication in the sense of sharing between individuals (to be share one-to-one) and public media to share with anyone without any individual specificity.

Boyd in Nasrullah (2015) defines social media as a collection of software that allows individuals and communities to gather, share, communicate, and in certain cases collaborate or play with each other. Social media has the power of user-generated content (UGC) where content is generated by users, not by editors as in mass media agencies.

In essence, with social media, various two-way activities can be carried out in various forms of exchange, collaboration, and getting to know each other in written, visual and audiovisual forms. Social media starts with three things, namely Sharing, Collaborating and Connecting.

Benefits of Social Media in Effective Integrated Marketing Communication

Social media is actually a medium of socialization and interaction, as well as attracting other people to view and visit links that contain information about products and others. So it is natural that its existence is used as the easiest and cheapest (low-cost) marketing medium by the company. This is what finally attracts business people to make social media a mainstay of promotion media supported by a company website/blog that can display a complete company profile. In fact, it is not uncommon for business actors to only have social media but still exist in the competition. (Siswanto, 2013) (Malini, H., & Giovandi, H., 2022).

Marketing communication is an attempt to convey messages to the public, especially target consumers regarding the existence of a product in the market. The concept that is generally used to convey messages is often referred to as the promotion mix, namely advertising (advertising), sales promotion (sales promotion), personal selling (personal selling), public relations and publicity (publicity and public relations) and sales. direct (direct selling).

If you look at the promotion mix, social media has proven to be able to play a role as Integrated Marketing Communication (IMC). Social media is able to carry out the function of the promotional mix in an integrated manner, even to the point of the transaction process, where when the customer has become a user who is a member of a social media account owned by the company, be it friendship or fan page (on Facebook), follower (on Twitter) or another term used by some social media providers. Then the company will automatically be able to establish continuous communication, so that the company can communicate persuasively and introduce its products in the future (Siswanto, 2013).

The above is in accordance with the statement that IMC is a process of development and implementation as a form of persuasive communication program to customers and prospective customers on an ongoing basis. The goal is to influence and have a direct effect on the behavior of its target audience, namely customers. IMC considers all sources that can connect customers and prospects with the products or services of a brand or company, are potential pathways for conveying information in the future. In other words, the IMC process starts with the customer or prospective customer and then turns to the company to determine the form and method used and developed for the program being run. (Shimp in Siswanto, 2013).

Benefits of Social Media in Effective Political Communication

Political communication is the application of communication principles in political campaigns that vary by individuals, organizations, procedures and involve analysis, development, execution and campaign management strategies by candidates, political parties, governments, lobbyists, certainly interested groups that can be used. To direct public opinion, the development of their own ideology.

Win in elections and become the legislative election results in response to what needs are desired, chosen by people and groups in society.

According to Prisgunanto (2014) in political communication, the important issue is the image of the political figure. Each member of a political party is usually promoted intensely and all-out. This is clearly seen from the policies taken by political parties and monitored by the mass media or the press.

Social media as a trend on the internet is currently being used as a media for political campaigns, including the implementation of social media from political parties in the 2014 Indonesian legislative elections. This can be seen in the social media used by the contestants, such as Facebook and Twitter.

From there it can be seen that social media are:

- 1) Effective tool for current and future political campaigns,
- 2) Reach voters and direct supporters,
- 3) Used by political parties to display their logo/icon, and
- 4) Quick count results also show that parties politicians who use social media as part of their campaign to win the legislative election (abdillah, 2014)

According to Sandra (2013), every social media user, including politicians, can produce messages with a more targeted public due to the availability of modern technological stimuli during the campaign to reconnect with voters. The openness of the media, supported by increasingly advanced advances in information technology, as well as the packaging of message content makes it easier for political actors to differentiate themselves from the existing political competition, coupled with the ability to provide borderless political information. Among them is the branding of political candidates/parties as a result of the contemporary political communication process. Political branding is the use of strategic consumer branding to build a political image (Arulanandam, B. V., Malini, H., & Oktaningtias, F., 2020) where one example of branding in contemporary political communication is what Barack Obama did in the 2007 US presidential election. The same thing also happened in the world of Indonesian political communication. Post-reform where democratization has become a thing that should exist, Joko Widodo who in 2012, won the election for the Governor of DKI Jakarta. Social media has a role for Jokowi to communicate with the public during the campaign period to convey political messages. From the comparison of share of awareness of each candidate, Jokowi and Basuki lead with a percentage of 52.6%. This share of awareness shows the high potential of the couple to win the regional election from their activities on social media. Of all the social media used, Twitter which is a media run personally by Jokowi, this is also shown by Jokowi's Twitter activity which is very active during the campaign period compared to other times. Plus Jakarta is the highest city in the world that uses Twitter.

Methods

This study uses qualitative data with a descriptive method, where the data is obtained by library research and some other literature found on the internet is also reviewed for its contribution to related topics where this research seeks to describe existing phenomena (Oztamel & Gursev, 2018).

Findings

Tuesday, April 26, 2022, a photo of Elon Musk holding a kopiko has gone viral on social media. The Kopiko candy was a gift from the Coordinating Minister for Maritime Affairs and Investment Luhut Binsar Panjaitan during a meeting with Tesla CEO Elon Musk at SpaceX headquarters in Texas, United States.



Quoted from Investing.com, from April 22 to May 9 2022, Mayora Indah Tbk's stock chart data was obtained as follows:

Graph 1. Share Position of Mayora Indah Tbk on April 22, 2022



Graph 2. Share Position of Mayora Indah Tbk on April 26, 2022



Graph 3. Share Position of Mayora Indah Tbk on 27 April 2022



Graph 4. Share Position of Mayora Indah Tbk on April 28, 2022



Discussion

Table 1. Data summary of Mayora Indah Tbk Shares

Date	Opening price (Rupiah)	Closing price (Rupiah)	VOLUME (Miliar Rupiah)
22 April 2022	1.585	1.580	2,7
26 April 2022	1.650	1.750	22
27 April 2022	1.750	1.765	23
28 April 2022	1.765	1.650	4,2

Based on the data obtained and summarized in Table 1, on the 22nd the position of Mayora's shares at the time of opening was Rp. 1,585,- and closed Rp. 1,580.

Mayora Indah Tbk (MYOR) strengthened two days in a row, after one of its coffee products was taken by Elon Musk. Mayora's shares rose 7.3 percent from Rp. 1,630 to Rp. 1,750 at the close of the stock exchange on Tuesday 26 April 2022. The strengthening continued on Wednesday, 27 April 2022, from Rp. 1,750 rose to Rp. 1,760 at the close of the first session of the exchange. Continued to increase 5 points until the closing of the second session at the level of Rp. 1,765. on April 28, 2022, there was a slight decrease in price equal to the opening of Rp. 1,765,- and closing of Rp. 1,650, but still a better value compared to the stock price on April 22, 2022.

Conclusion

Based on the results of the observation analysis of PT. Mayora Indah Tbk after the exposure of Mayora's product photos with Elon Musk on Social Media and data collection, it is concluded that public figures have a positive influence on fluctuating stock price increases, although the period of time does not last long.

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Human Experience Management as The Basic For Development of State Civil Apparatus

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Abstract: To reduce the need for technological developments to exclude the humanistic element of every state civil apparatus, several countries in the era of society 5.0 implemented Human Experience Management into their governance system. This study aims to analyze the implementation of inclusive Human Experience Management to serve as the basis for fostering the management of state civil servants in the Government. This study uses a qualitative approach through descriptive analysis methods based on literature studies. The results of this study describe an analysis of four important aspects that need to be applied in the application of Human Experience Management. In its implementation, these four aspects are continuously monitored and evaluated, so that the leaders and employees can contribute optimally to achieve the agency's performance goals together.

Keywords : era of society 5.0, human resource management development, human experience management, employee experience

Introduction

Nowadays, technological developments in everyday life can no longer be ruled out and become a major need in supporting all aspects of life. The changing needs of society along with technological developments have become a dynamic that leaders need to respond to. This is related to efforts to improve the quality of public services that require changes from the organizational and personal aspects of the state civil apparatus.

The existence of the industrial revolution 4.0 era and entering the era of society 5.0 created a new dynamic in the governance of employees in the government. In the era of the industrial revolution 4.0, there was a comprehensive transformation of all aspects of production in the industry through the incorporation of digital technology and the internet in conventional industry (Prasetyo, H. dan Sutopo, 2018). Then entering the era of society 5.0, humans are required to develop in line with technological developments as users in creating collaborative activities that are effective in working in order to achieve optimal performance results. This parameter change also occurs in the governance system where the state civil apparatus as the organizer and implementer of public services is not limited to the physical meeting system but can be carried out anywhere with the development of technology in supporting work activities.

The era of the industrial revolution 4.0 is dominated by high-tech machines that will compete with humans. Technology which was originally expected to create new value and solve human problems, in fact can create new problems, namely human degradation. This era has a weakness where the human element as an important part of the organization is not developed in line with the development of the technology used. Answering these problems, the concept of society 5.0 introduced by Japan can be used as a reference. Society 5.0 is a vision oriented towards optimizing technological innovation in order to contribute to the improvement of the lives of global people (Anshori, 2020). Society 5.0 is a growth strategy concept created by the Japanese government in dealing with challenges such as the aging population, declining birth rates, declining population and aging infrastructure (Fukuyama, 2018).

If society 4.0 allows us to access and share information on the internet, society 5.0 is an era where all technology is part of humans themselves (Ellitan, 2020). Technologies such as artificial intelligence (AI) and big data support activities while still paying attention to the humanistic side. Society 5.0 helps State Civil Apparatus (ASN) to live a more meaningful life. ASN collaborates with AI to solve problems thereby realizing collaborative integration between virtual and physical spaces. Technology will make it easier for people to realize human well-being through fostering ASN in Government Agencies with the Human Experience Management (HXM) approach.

ASN development is a crucial issue to be studied and analyzed further as a form of support for leaders in managing and aligning apparatus resources in the digitalization era. Several HR bureaus in government agencies are developing a coaching system based on the concept of human capital for each employee, both new employees, those who already have experience and employees who are about to retire. This is related to the development of information and communication technology infrastructure to support digital transformation as one of the *Proyek Prioritas Strategis Pemerintah tahun 2020-2024* in *Peraturan Presiden Nomor 18 Tahun 2020 Tentang Rencana Pembangunan Jangka Menengah Nasional Tahun 2020-2024*.

The fulfillment of the need for personnel resources within the Government is still in the spotlight due to its impact on the function of the organization. This is because several agencies open formations for the needs of state civil servants only to accommodate the status of employees who have served for a long time as honorary staff to be appointed as ASN (in this case they can become Government Employees with a Work Agreement/PPPK). The PPPK system is intended to clarify the status of these employees with a binding contract system and benefits that are not much different from that of Civil Servants (PNS). This phenomenon illustrates how inefficient the arrangement of employees in government agencies is. Employee status has so far been accommodated regardless of the need for competence possessed by employees in supporting the tasks and functions of the organization. The opening of the Selection of Candidates for State Civil Apparatus will be more efficient if it is accompanied by the need for competencies possessed by employees based on the workload in each organizational unit and the need for special competencies that are mandatory to be fulfilled in the context of carrying out tasks.

Governance systems in several developed countries have implemented aspects of human experience management into the governance system for developing apparatus resources. This reduces technological developments that override humanistic elements in public services. The humanistic aspect can be seen from the experience that each employee has while serving as ASN.

Based on these problems, the Government needs to conduct ASN development based on competence and experience through a human experience management concept approach to governance so that the implementation of public services is optimal. This raises the question of what kind of human experience management implementation design is appropriate to be the basis for developing apparatus resources in government agencies? This study aims to formulate a comprehensive design regarding human experience management in fostering the management of apparatus resources in the Government.

Literature Review

Apparatus Resource Development

Human resources are the main entity in the organization's sustainability activities. Sophisticated technology used without the active role of human resources as those who control and monitor all activities will be inefficient in supporting the results of organizational performance. The role of human resources as a driver of organizational goals is important in supporting all aspects. The technological transformation starting from the industrial revolution 4.0 to the era of society 5.0 has an overall influence in determining human resource planning in organizations based

on technological intellectual abilities. Human resource planning includes aspects of quality, qualification, competence and human resource needs in the organization. Therefore, coaching is important to do so that employees are more efficient and effective in carrying out the work that is the burden of their duties.

According to Thoha (2002) Coaching is an action, process, result, or statement for the better. In this case, it shows progress, improvement, growth, evolution of various possibilities, development, or improvement of something. In line with this, Siagian (2001) explained that in order to be able to carry out a heavy and good task, the government needed to improve the development of the apparatus in terms of quality and quantity. Human resource development is an important aspect in measuring the sustainability of an organization in order to achieve its goals, improving and structuring employees in the organization are stages that need to be passed in formulating strategic plans in order to achieve the performance output of an organization.

Human resource management according to Veithzal Rivai in Akhmad, Subekhi, (2021) is one of the fields of general management which includes aspects of planning, organizing, implementing and controlling. Planning is the process of determining actions to achieve goals. Organizing is a process of division of labor accompanied by delegation of authority. Directing is the activity of directing all employees to cooperate and work effectively and efficiently in helping to achieve organizational goals. Meanwhile, according to Sedarmayanti (2009), measurement of the arrangement of human resources / apparatus is carried out by taking into account: (1) Application of the merit system in personnel management; (2) an effective education and training system; (3) Standards and performance improvement; (4) a clear and planned career pattern; (5) Position competency standards; (6) Job classification; (7) Duties, functions and proportional task load; (8) Recruitment according to procedure; (9) Placement of employees according to expertise; (10) adequate remuneration; (11) Improvement of personnel management information system.

In line with this, Hani Handoko in Thomassawa (2019) argued that human resource management is the recruitment, selection, development, maintenance and use of human resources to achieve individual and organizational goals. Thus, the development of Human Resources means activities carried out on the existence of Human Resources (Employees) in an Organization, so that they are more efficient and effective in carrying out their work as well as possible and as effectively as possible. Another opinion expressed by Ashari (2010) who stated that the management of the human resources of the apparatus was carried out through: (1) individual competency assessment for the apparatus; (2) Building a performance appraisal system; (3) Develop a procurement and selection system; (4) Develop a pattern of development and training; (5) Strengthening the pattern of rotation, mutation, and promotion; (6) Strengthening career patterns; (7) Encouraging the realization of prosperous civil servants; (8) Build or strengthen the personnel database; (9) Encouraging the creation of apparatus discipline.

So, based on the expert opinion above, it can be synthesized that the measurement of the arrangement of human resources for the apparatus in general consists of (1) tasks, functions and proportional task load; (2) recruitment according to procedures; (3) adequate remuneration; (4) job competency standards; (5) individual competency assessment for apparatus; (6) build a performance appraisal system; (7) build or strengthen the personnel database; (8) develop a pattern of development and training.

Transforming HCM to HXM Approach

The development of Human Capital Management (HCM) for organizations is essentially an investment. Investments in the development of Human Capital Management (HCM) are costs aimed at increasing human productive capacity, through efforts to improve health, education and job training. The logical reason that can be put forward is that a healthy, educated and skilled

workforce will become a productive workforce, and further increases in productivity mean increased incomes. With good Human Capital Management (HCM), organizations will have competitive strengths and will be difficult to imitate, so traditional sources of competitive success such as production process technology, market protection, access to No. resources and economies of scale must become more efficient.

Human Capital Management (HCM) is a strategic approach to human resource management that focuses on the knowledge, skills, abilities, and capacities in the development and innovation of people within an organization. (Armstrong, 2008). Human Capital Management (HCM) is an integrated effort to manage and develop human capabilities in order to achieve a high and significant level of performance. Chatzkel further said that Human Capital Management (HCM) is an effort to manage and develop human capabilities to achieve a much higher level of performance (Chatzkel, 2004). The concept of Human Capital Management (HCM) answers the idea of how a person has competence according to his position/position by placing highly talented employees to occupy positions/positions that match their talents. This opinion assumes that business profits develop and are sustainable when the company is able to produce goods and services that suit customer needs better than those offered by its competitors. The Human Capital Management (HCM) approach as a system is designed to create a sustainable competitive advantage through employee development. Not all important roles in a company have the same degree in creating customer and shareholder satisfaction. But the most important thing when placing employee performance roles in the company is that they must have the best ability to meet customer needs compared to employees in competing companies.

HXM is an evolution of Human Capital Management (HCM), with employee experience at its center (Benjamin, 2019). On the other side, Ernst & Young defines employee experience as an organization and all of its personnel working together to build an authentic and personalized work experience so as to generate enthusiasm for work, innovation, and productivity to strengthen individual, team and organizational performance (Priantara, 2019). The HXM approach was formed to complement HCM where ASN employees are seen as capital that has value if invested properly and will provide benefits for the Agency.

Implementation HXM in to Employee Experience

The post-pandemic era has made many companies realize that benefits and positNo. ns are no longer the most important thing in retaining employees, but employee experience. Employee experience is defined as the steps taken by the company to shape the way and habits of employees at work. If implemented correctly, employee experience can have a significant impact on a business and its employees. According to a study conducted by Bersin (2021), *employee experience* can provide various positive impacts such as:

- a. Impact of employee experience on innovation
3.7 times more prepared to adapt to change, 4.3 times more able to innovate effectively
- b. Impact of employee experience on business
2.2 times more likely No.e financial targets, 2.4 times more opportunities to improve customer satisfaction
- c. Impact of employee experience on employees
5.1 times more likely to feel a sense of belonging, 5.2 times more likely to be a good workplace, and 5.1 times more likely to retain and connect with employees.

In the HXM approach, ASN employees are given support to do their jobs by providing employee experience. As shown in table 1, the following are factors that can affect employee experience in the organization (Flynn, J. dan Mazor, 2017).

Tabel 1. Factors Affecting Employee Experience in Organizations

Meaningful Work	Supportive Management	Positive Behaviour Work	Chance of Develop	Trusted Leader
Autonomy	Clear and transparent goals	Flexible Behaviour Work	On-the-job training	Vision and mission
By Choice	Coaching	Humanity Placement Work	Talent Facility	Invest in HR
Solid Team	Invest of development	Work Culture	Dynamic independent learning	Transparency and honest
Flexible Time	Agile performance management	Justice, inclusive, diversity of behaviour work	high-impact culture study	Inspiration

Source : Flynn, J. and Mazor (2017)

The existence of an employee experience framework in the company will be a guide to creating an optimal employee experience such as :

- a) Aspects that need to be prepared by the organization; what the team formation looks like, the team leader, and how they guide the team,
- b) physical scope of work, digital realm, and also culture,
- c) employee welfare and health,
- d) employee development strategy and business process implementation of employee duties and functions,
- e) increase the confidence of each employee.

Based on research conducted by Bersin (2021), there are at least five important points that must be considered in order to have a good employee experience in the company, namely trust, concern, transparency, culture, and leadership. This is explained in more detail through several aspects, namely:

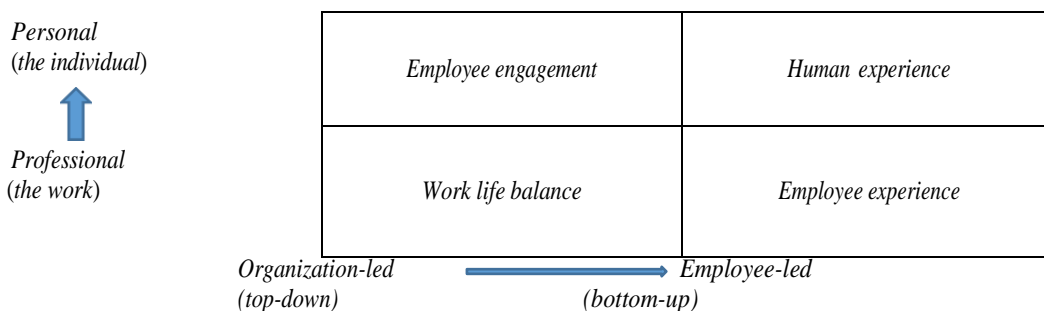
- a) Focus on building trust, transparency, inclusive environment and caring
The sense of trust that is built between employees and the company is very important. When employees no longer have a sense of trust in their place of employment, maybe you can give them more incentive to stay with the company. However, this usually doesn't last long.
- b) Build a supportive work environment
Some experts predict that the biggest factor of successful employee experience is employees who help each other. This concept replaces the outdated concept that has long been a top-down barrier or top vs bottom. This will remove the barrier between superiors and subordinates so that work becomes smoother and creates an inclusive space.
- c) Continuous innovation and development depends on a fair reward system
Although salary and compensation are not a priority concern in employee experience practices, fair reward planning has a significant impact on employees and the performance they will provide.
- d) Companies that can consistently prioritize the development of their employees are proven to be able to develop their business performance
A study conducted by Josh Bersin found that companies that focus on investing in their talent tend to have more profits, have customers who are more satisfied with their performance, and have higher levels of employee engagement.
- e) Implementation of employee experience will lead directly to business performance

It is undeniable that employees who are more engaged with the company, will be happier, more productive, and can also provide better service to customers. However, if the company can produce the right employee experience strategy, they will get better results in all aspects.

- f) Good human resource capabilities and the technology applied is crucial
As already explained, the employee experience requires trust, transparency, and empathy. How can you implement these concepts and strategies in your company? The answer is through the capability of human resources combined with the use of appropriate technology.

Employee experience comes from within the individual of each employee, is still focused on work by not giving the meaning that employees are looking for at work, while human experience is built based on employee experience which is a meaningful work process (Volini, 2019). This is as described in figure 1, below:

Figure 1. Difference between Human Experience and Employee Experience



Source : Volini (2019)

Based on the figure above, it can be formulated with a shift from professional to personal aspects in employees through the implementation of work life balance towards employee engagement. This phenomenon also occurs in line with the shift in the aspect of employee engagement towards human experience with the impact of the shift in organization led to employee led. In this paradigm, lower levels will feel closer to the leadership and there will be no creation of boundaries in doing work with an atmosphere of engagement that arises from the perspective of employee experience in the organizational environment of employees working. Each leader will find it difficult to meet the above-mentioned chart. However, it is very possible that once implemented, the results will differ from one organization to another.

Human Experience Management Approach for Civil Servant

According to Wiryanto (2020) the meaning of the word experience in Human Experience Management is the meaning of experience. The meaning of life is the ability and quality of individual civil servant appreciation of how much they can develop their potential and how far they have succeeded in achieving their life goals in working to give meaning to their lives while being civil servant. Therefore, the orientation of the Human Experience Management approach for civil servant in the future is future-oriented, because the meaning of civil servant life must be found to support the realization of the goals of government organizations.

In line with this, each individual will be facilitated to find the meaning of his life in order to develop his potential and provide support for the individual to achieve his life goals which ultimately gives meaning to his life (Wiryanto, 2020). The development of civil servant employees in government agencies in Human Experience Management focuses on the things that become

the strengths and interests of employees. This approach also encourages civil servant to consistently contribute to the organization and society in a positive and meaningful way. Therefore, it is important to work wholeheartedly through the principles of openness and empathy between leaders and each civil servant employee.

This is also in tune with the opinion Albert (2020) which explains that Human Experience Management has a great influence on employees. In the private sector, by improving employee experience through Human Experience Management, the relationship between employees and the company can remain good. Therefore, you need to know the reason why Human Experience Management is the future system of human resources.

Here are some important reasons why Human Experience Management is important in today's companies:

a) **Increased Stress Requires Company Empathy**

The variety of people who work today and the various challenges faced by each employee require the company's sense of empathy in handling them. This has to do with the way a company tries to understand every other perspective its employees need.

That way, companies can offer a better and more friendly work experience to increase company performance and productivity.

b) **Employees Have More Expectations**

Nowadays people who work in a company are no longer limited to one single factor, namely the payroll system. However, they focus more on things that are more experience-oriented, such as the technology they use, office work atmosphere, and other development programs. Human Experience Management can certainly help companies to understand every employee's expectations that need to be applied through certain programs.

c) **Skill Competition**

The current high job competition while the demand for competent workforce continues. The company always tries to retain its best employees in various ways.

One of them is Human Experience Management which can provide a more efficient work experience so that they will continue to work at the company every time.

d) **Helping to Improve a Positive Work Culture**

A pleasant organizational culture can certainly attract candidates who have strong potential and retain employees who have good performance. However, organizational culture cannot be formed in a relatively short time.

By using Human Experience Management, companies can design a more pleasant and effective employee experience so that the goals of the company are achieved.

This is because Human Experience Management always focuses on individual needs so that the company can be helped in creating a good organizational environment (HR, 2022).

Then in government organizations, the Human Experience Management approach can be influenced by the experience and perception of civil servant on the work system used, ranging from technology, workspace, to their careers and opportunities to develop. This approach is in accordance with the characteristics of civil servant entering the world of work in government agencies. They expect a fun, interesting and meaningful work experience as civil servant for themselves as well as flexibility, connectivity, mentoring and the latest information technology.

Methods

This study uses a qualitative approach through descriptive analysis methods based on literature studies. The literature obtained was then used to analyse the construction design of the implementation of Human Experience Management in fostering apparatus resource management to answer the research problem. The literature sources used are books, research articles and articles in online mass media related to the implementation of Human Experience Management.

Findings

In the Human Experience Management approach, it is very important to give civil servant employees a humane experience. In other words, employees need to be given the opportunity to learn, grow, and develop themselves so that they are happier, more productive, and more enthusiastic in carrying out their work which ultimately leads to organizational success and progress. The strategic steps that can be taken by leaders in implementing Human Experience Management in their agencies can be explained in detail through Figure 2 below:

Figure 2. Aspects in the Implementation of Human Experience Management in HR Apparatus



Source : Data processed by the author

Based on figure 2, in the first step, stakeholders can set organizational goals by looking at strategic conditions and analyzing the vision and mission with the obstacles and challenges that will be faced. In setting organizational goals, stakeholders can see from the diversity of competencies possessed by all employees, with the competencies possessed, of course, they can become a means of achieving the vision and mission set by the organization. Several important aspects in determining the organization's vision and mission are the human resources owned by the organization, with the competencies possessed and through the competency development facilities provided by the organization, it will make it easier for stakeholders to achieve the vision and mission and can make an advantage when faced with challenges that arise. Describes of figure 2, the intense competition between sectors in the organization's business environment.

In the second step, stakeholders need to set and adjust performance targets in line with the previously defined vision and mission of the organization. This performance target is a derivative of the organization's vision and mission that will be used as a reference for work output from top level to implementers in carrying out their duties in the organization. In other words, the principle of setting and adjusting performance targets is essential by seeing that the common thread in the implementation of tasks and the output achievement of each employee is based on the performance targets set by the organization.

In the third step, after the organization has set the vision, mission and performance targets for all employees, the next step is the leaders can map out the competencies possessed by all employees. This mapping can be carried out through a humanist approach in accordance with the principle of employee experience. With this approach, leaders will get a more transparent profile by describing the actual condition of each employee. Employees will feel open and see the existence of empathy from the organization towards themselves, with this all employees can be open to explain what conditions are needed at this time and if there are problems in competency

development, employees will explain more clearly what obstacles they have faced so far. Through this situation, the problems that exist in the internal organization will be responded to transparently by the stakeholders, and the development of competencies needed by each employee in carrying out their duties can be adequately established.

In the fourth step, to strategically face the era of society 5.0, stakeholders need to take action in integrating the technological development system with the human resource competencies of each employee. This is mandatory with the consideration that every task performed by all employees requires technology to facilitate it. Stakeholders need to plan and map technology needs that are currently developing by aligning the business processes carried out by the organization. Employees as users also need to do upskilling through competency development in order to adapt to current technological developments.

Through these strategic steps, organizational culture will be realized with an employee experience approach that brings transparent characteristics in mitigating the presence and meaning of each employee. Organizational culture through the employee experience approach is one manifestation of organizational maturity that sees empathy for the actual condition of employees. Through the principle of openness between leaders and employees, it will make it easier for stakeholders to realize the vision and mission of the ultimate goal to be achieved by the organization.

To implement Human Experience Management in government organizations, supporting data is needed, namely operational data and experience data then integrated using technology, besides that it also requires cooperation from all units in the organization. This is in line with the opinion Albert (2020) the application of the Human Experience Management approach can produce several benefits for the organization, namely:

- a) Meet employee expectations
Millennials expect an interesting and enjoyable work experience, Human Experience Management not only provides technology that is connected to the workplace, Human Experience Management also allows organizations to manage the employee experience by providing feedback and follow-up to encourage continuous improvement in the daily work experience.
- b) Demonstrate a sense of organizational empathy for employees
Employees today are faced with rapid changes in work that can trigger stress. Human Experience Management is an organization's way of showing empathy because it can see the world from an employee's perspective
- c) Meeting the need for employee skill development
Human Experience Management helps organizations develop employee skills and retain the best employees because it provides an employee-centred experience and career plan
- d) Creating agility in employees
Human Experience Management makes organizations adapt by forming human resources that are smarter and more responsive in dealing with new demands.
- e) Creating organizational culture
Human Experience Management encourages organizations to design employee work experiences in a positive way so as to form an inclusive organizational culture within the government.

In its implementation, the five aspects mentioned above are continuously carried out and monitoring and evaluation are needed in their application so that leaders and employees together can contribute optimally in order to achieve the goals of the agency's performance.

Based on the literature review and previous discussion, the essence of employee experience provides a clear and measurable picture of organizational sustainability by making human resources the main factor and focusing on organizational goals. Of the eight areas of change in bureaucratic reform, the field of changing personnel resources has a target whose realization has not met the

target related to minimum competency development (Fauziah & Prasetyo, 2020). This is also relevant to the development of apparatus resources that prioritize the human resource approach as a humanist approach. The results of research from Irmawati (2015) show that the purpose of human resource development is to provide the 'coach' needed to strengthen and grow the knowledge, skills, and abilities that an employee already has. The research results from Syafarudin & Hertati (2020) explain that human capital is very important because it is a source of innovation and strategic updates, which can be obtained from brainstorming through laboratory research, goal management, process reengineering, and improvement or development of worker skills. Human capital is an intangible asset that is not easy to measure considering that humans have a dynamic nature and relatively change along with changing situations and conditions (Hidayat, 2013). Based on Sharma (2013), human capital also includes character, attitude, health, and self-motivation. Therefore, the human experience management approach is an alternative solution in improving the development of apparatus resources to be more competent in carrying out government duties.

Conclusion

To create Human Experience Management within government agencies, it takes the role of all aspects of the organization as the organization understands customer experience. ASN as a public servant where the customer is the community, must understand the needs of customers that require interaction and a wider perspective from the dynamic community needs. With the Human Experience Management approach to ASN, it is hoped that it can encourage every employee to provide support and contribution consistently in a positive way during their tenure.

The formation of experience in ASN can be done by developing competence and learning culture. Employees need to be given experience in terms of technology, work space and opportunities for growth, in order to create a positive perception of employees. Human Experience Management can be realized with the role of leaders of government organizations in understanding employees.

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THE EFFECT OF HUMAN DEVELOPMENT INDEX AND ECONOMIC GROWTH ON POVERTY LEVEL IN WEST JAVA 2011-2020

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Abstract: The social problem that must be reduced that can hinder development is poverty. Based on existing theories and several studies that have been carried out, the problem of poverty is generally related to several factors such as the quality of human resources, unemployment, and economic growth. This study aims to determine the effect of the human development index (HDI) and economic growth on poverty levels. This study uses multiple regression analysis with panel data as an analytical method and is also a quantitative study using secondary data from BPS with panel data which is time series data for the period 2011-2020 and cross section data from 18 districts and 9 cities in West Java. The results of panel data regression show that the Human Development Index (X1) partially affects Poverty (Y), Economic Growth (X2) partially affects Poverty (Y), Human Development Index (X1) and Economic Growth (X2) simultaneously affect significant to the Human Development Index (Y), with the percentage of influence of 96.53%, while the remaining 3.47% is explained by other variables outside the study.

Keywords: Human development index, economic growth and poverty

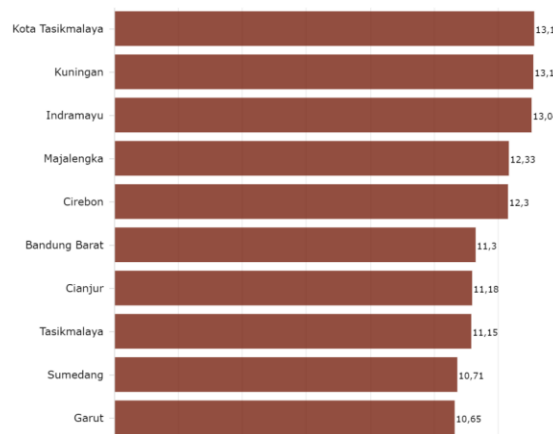
Introduction

The development problem that can occur in both developed and developing countries is poverty and is also one of the biggest issues in the Indonesian economy. Poverty is a condition in which a person cannot fulfill basic needs such as food, clothing, medicine and shelter (Primandhana, W. P., & Wahed, M. 2021). Poverty is one measure of social and economic conditions in assessing the success of government development in an area (Hardinandar 2019).

Poverty is still a social problem in West Java. Based on data from the Central Statistics Agency (BPS), there are 6.82 thousand people (4.2%) of the population of West Java living below the poverty line in March 2021. While the poverty line is IDR 427.4 thousand per capita per month. Poverty is still a social problem in West Java. Based on data from the Central Statistics Agency (BPS), there are 6.82 thousand people (4.2%) of the population of West Java living below the poverty line in March 2021. While the poverty line is IDR 427.4 thousand per capita per month. Tasikmalaya is the district/city with the highest poverty rate in West Java, reaching 13.13% in March 2021. This figure is an increase of 16 basis points (bps) compared to September 2020. The Covid-19 pandemic has had an impact on increasing the percentage of poor people in the city. The district/city with the next largest percentage of poor people is Kuningan Regency, which is 13.1%. Followed by Indramayu with a poverty rate of 13.04%, next Majalengka with a poverty rate of 12.33% and Cirebon 12.3%. Then West Bandung Regency has a poverty rate of 11.3%. After that, there is Cianjur Regency with a poor population

of 11.18%, Tasikmalaya Regency 11.15%, and Sumedang Regency and Garut Regency with poverty rates of 10.71% and 10.65% respectively. Of the 10 regencies/cities with the highest poverty rates in West Java, the largest increase occurred in Cirebon Regency, reaching 106 bps in March 2021 compared to September 2021. Meanwhile, the largest increase in the number of poor people was in Cianjur Regency, which was 25.25 thousand soul.

Table 1.1
10 Regencies/Cities with the Highest Poverty Rates in West Java



Source: Central Bureau of Statistics (BPS)

The increase in poverty in West Java is due to the increasing trend of national and regional poverty on the island of Java, besides that the Covid-19 pandemic which began to spread in March 2020 and continues to have resulted in changes in population behavior and economic activity, slowing economic growth, increasing unemployment rates, decreasing encourage an increase in the poverty rate in West Java.

In overcoming poverty by increasing economic growth which is one of the benchmarks for the success of development. According to Sukirno, economic growth is important in economic activity. Economic growth can affect economic development. The greater the economic growth of a region, the better the region's economy will be, and vice versa (Sukirno 2006). With increasing economic growth, it will cause a trickle-down effect, namely stating that with the progress of a country's economy, it will naturally hatch downwards so as to create jobs and will foster various economic conditions.

The rate of economic growth is measured based on the added value that can be generated by a region or known as the Gross Regional Domestic Product (GRDP). This GRDP is a reflection of the economic potential of a region. GRDP value is the aggregate of added value generated by production units operating in the area. GRDP describes the economic growth that has been achieved and also shows the structure of the regional economy. Regional development is focused on economic development which is realized through economic growth efforts. Economic growth is related to increased production of goods and services. High economic growth is needed to accelerate changes in the structure of the regional economy from the primary economic sector to a balanced and dynamic secondary

and tertiary economic sector. Economic growth is also needed to drive and spur development in other fields as well as the main force of development in order to increase people's income and overcome socio-economic inequality. However, it should be noted that the economic growth conditions of a region or a country cannot be separated from the world economic turmoil. Moreover, in an open economic system, if there is a turmoil in the international economy, it will have an impact on the economy of a country, including smaller areas. As a measure of the success of development, it can be seen from economic growth, economic structure and the smaller income inequality between residents, between regions and between sectors. The success of economic development is indicated by 3 main values, namely: (1) the development of the community's ability to meet their basic needs, (2) the increased self-esteem of the community as human beings, and (3) the increased ability of the community to choose (freedom from servitude) which is one of human rights (Todaro 2000). Economic development of a region is essentially an activity that is carried out consciously and continuously to create a better situation together and continuously. Within that framework, the economic development of a region also aims to promote equitable distribution of regional development and the results of such development in order to improve people's welfare in a fair and equitable manner.

The Human Development Index (HDI) is a tool to measure the quality of a country's human resources. HDI as an indicator for measuring the quality of human life is built through 4 basic components, namely: life expectancy which represents the health sector, literacy rate and average number of years of schooling which measures achievement in the field of education. If the world of education has fallen, then the destruction of the nation is just a matter of time. This is because education concerns character building while maintaining human identity, as well as the ability of people's purchasing power to meet basic needs as seen from the average amount of per capita expenditure as a component that represents development achievements for a decent life. The quality of human resources can also be a factor causing the occurrence of poor people. The quality of human resources can be seen from the quality of life index/human development index. The low Human Development Index (HDI) will result in low work productivity of the population. Low productivity results in low income. So that with low income causes a high number of poor people. Human development in Indonesia is synonymous with poverty reduction. Investments in education and health will be more meaningful for the poor than for the non-poor, because for the poor the main asset is their manual labor (Mulyaningsih, 2008). The existence of cheap education and health facilities will greatly help to increase productivity, and in turn increase income.

It is different with the Priseptian Laga research that economic growth has a negative and insignificant effect on poverty. This shows that poverty in East Java is decreasing along with increasing growth in East Java (Priseptian 2022). But the increase in economic growth is neither large nor significant. Likewise with the research conducted by Soleh (2011) that the high economic growth of a region does not guarantee the welfare of the people in the area, as happened in West

Papua Province which has the highest average economic growth nationally (11.27% per year). but the percentage of poor people in the province occupies thesecond position (35.77%) after Papua Province, this shows that economic growthin the region is not in favor of the poor (Soleh 2011). In addition to economic growth, the success of the economy according to the concept of economic development is dependent on the success of human development. Humans are development creatures whose quality is determined bythe results of their development (Abdillah 2001). Human development is a measure of overall development performance. Human development is also a development process in expanding income, health, and education. The combination of these three components is called the human development index (HDI). HDI is the most comprehensive indicator because in addition to taking intoaccount material aspects, it also takes into account non-material aspects. The lowHDI results in low work productivity of the population. Furthermore, low productivity will result in low income gains, causing a high number of poor people, and vice versa.

Several studies have stated that HDI affects the level of poverty in a region. This is, for example, a study conducted by Jumika that the HDI greatly affects thereduction in the number of poverty in Central Java (Jumika 2012). However, it is different from the research of Dwi Susilowati which states that there is no causal relationship between HDI and poverty in Indonesia in the period 1990-2013 (DwiSusilowati 2015). This contradiction indicates that the importance of similarresearch in order to determine the relationship between HDI and poverty in certainareas, both small and wider, such as Indonesia as a guide for policy making in order to reduce poverty, whose relationship is dynamic from time to time. Based on the phenomenon and previous studies, the authors are interested in researching the effect of the human development index and economic growth onthe poverty rate in West Java in 2011-2020.

Literature Review

The Effect of Human development index on Poverty

Amartya Sen stated that the measurement of development is not only seen from income but there are other indicators, namely human development (Sofilda 2013). Sen stated that economic growth should not be seen as the main goal, but development should be able to improve the quality of life and the freedoms enjoyed by humans. In determining human quality, UNDP uses the Human Development Index (HDI). The composition of the HDI is based on three indicators, namely health, education, and standard of living (purchasing power) or income. An increase in a person's education is often associated with an increase in income or wages earned. If wages reflect productivity, the more people who have a higher level of education or training experience, the higher the productivity and the result will be higher growth for the national economy. In addition to education, health also has a role in increasing income. The effect of health on income, among others, by improving the health of the population will increase labor force participation. Health improvements can also lead to improvements in

education levels and self-potential development which then contribute to economic growth by increasing incomes (Paidri Hidayat 2014). Several studies have proven that HDI affects poverty levels, including the results of research from Sofilda et al. (2013) showing that HDI has a negative and significant effect on poverty levels in districts/cities of Papua Province. Likewise with Suliswanto's research that HDI plays a very important role in tackling poverty levels in Indonesia (Suliswanto 2013). In the research it is formulated that:

H1: HDI has a negative effect on poverty levels

The Effect of economic growth on poverty

Economic growth can be defined as the development of activities in the economy which causes the goods and services produced to increase (Sukirno 2006). With increasing economic growth, it will automatically trickle down to create jobs and economic development, known as the trickle down effect theory. Economic growth and high income levels are indicators of the availability of food, clothing, shelter, education, health, and needs. Economic growth can be seen from the value of economic product (GDP) and for a region/region within a certain period it can be seen from the Gross Regional Domestic Product (GRDP), both at current prices and at constant prices. GRDP describes the ability of an area to manage its natural resources (Firmansyah 2016). The amount of GRDP produced by each region is very dependent on the potential of natural resources and production factors of the area. The existence of limitations in the provision of these factors causes the amount of GRDP to vary between regions. GRDP at current prices is the added value of goods and services which is calculated using the prices prevailing at that time and is measured annually. Meanwhile, GRDP at constant prices describes the added value of goods and services which is calculated using prices in a certain year as a basic reference. Joko Susanto's research also shows that there is a negative influence between economic growth and the poverty rate, where a 1% increase in economic growth will reduce poverty by around 0.4%, *ceteris paribus*. Economic growth in the province of Central Java does not have a significant effect on poverty reduction (Jumika 2012). In the research it is formulated that:

H2: Economic growth has a negative effect on poverty levels

Methods

Research Population and Sample The population and sample in this study were all districts and cities in West Java Province. The sampling technique in this study was purposive sampling or a sampling technique with certain considerations. The sampling criteria in this study were that the province was registered as part of the Indonesian state and had regional reports published by the Central Statistics Agency (BPS) during the research year, namely 2011 – 2020. The results of purposive sampling showed 27 districts/cities that met the sample criteria in the study. This. The data collection technique used in this research is through literature and documentation studies. Literature study is a data collection technique used to obtain information about theories and concepts related to the problems studied. Documentation in this study is used to obtain information or data related to

research. Types of Data The type of data used in this study is secondary data consisting of data on Human Development (IPM), economic growth, and poverty in West Java Province during the period 2011-2020. The data is obtained from data that has been published in several sources, namely the Central Statistics Agency and the Ministry of Finance website. Data Analysis Method The data analysis method used in this study used panel data regression analysis. Panel data is a combination of data across time (time series) and across individuals (cross section). The time series data in this study is the research time period, which is 9 years (2011-2020) and the cross section data in this study is the HDI report for each district and city in West Java Province totaling 27 districts/cities. In this study using the Eviews application and using the pool model in analyzing the data. The pool model is actually panel data, except that each group is separated based on its object (Winarno 2015). The general model equation for panel data regression is as follows:

$$Y = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + u_{it}$$

Description: Y = Poverty

X1 = Human Development Index (HDI)
X2 = Economic Growth

Determine the model estimation method (Gujarati 2012)

a. Common Effect Model

Common Effect Model (CEM) is an approach that assumes that the intercepts of all cross section objects are the same, in other words, this method assumes that there are no time invariant differences for each individual.

b. Fixed Effect Model

Fixed Effect Model (FEM) is an approach that assumes that there is an intercept between individuals but the coefficient (slope) of the independent variable remains the same between individuals or over time. In FEM each individual cross section has its own intercept value.

c. Random Effect Model

Random Effect Model (REM) will estimate panel data where the disturbance variables may be interrelated over time and between individuals. This model is also called the Error Component Model (ECM) or the Generalized Least Square (GLS) technique (Yuliadi 2015).

Estimation Model Selection

a. Chow test

The Chow test was conducted to determine whether the CEM or FEM approach was better to use for panel data regression. The hypotheses in the Chow test areas follows (): H0: F cross section probability value > (0.05), CEM H1: F cross section probability value < (0.05), FEM

b. Hausman test

The Hausman test was conducted to determine whether the FEM or REM approach is better to use for panel data regression. The hypothesis in the Hausman test is as follows: H0: Chi-Square prob value > (0.05), REM H1: Chi-Square prob value < (0.05), FEM

c. Lagrange Multiplier Test

The Lagrange Multiplier test was performed to determine whether the CEM or REM approach is better to use for panel data regression. The hypothesis in the Lagrange multiplier test is as follows: H0: Breusch-Pagan prob value > (0.05), CEM. H1: Breusch-Pagan prob value < (0.05), REM.

Classic assumption test

Not all classical assumption tests must be performed on every linear regression model with the Ordinary Least Square (OLS) approach. The linearity test was not used because it was assumed that the model was linear. The normality test is basically not a requirement for Best Linear Unbiased Estimator (BLUE) and some opinions do not require it. The autocorrelation test only occurs in time series, not in panel and cross section data. Multicollinearity test needs to be done on regressions that use more than one independent variable because the test aims to test whether in the regression model there is a high or perfect correlation between independent variables. Heteroscedasticity test usually occurs in cross section data, panel data is closer to cross section characteristics than time series. Heteroscedasticity test is used to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation. Based on this description, this study only tested the multicollinearity test and the heteroscedasticity test.

Hypothesis testing

a. t test (Partial)

The t-statistical test basically shows how far the influence of one independent variable on the dependent variable is by assuming the other independent variables are constant. The test can be done by comparing the calculated prob t with an alpha error rate (0.05). If the calculated prob t value is less than 0.05, it can be concluded that the independent variable has a significant effect on the dependent variable, whereas if the calculated prob t value is greater than 0.05, it can be concluded that the independent variable has no significant effect on the dependent variable.

b. F Test (Simultaneous)

The F statistic test basically shows whether all the independent variables included in the model have a joint or simultaneous influence on the dependent variable. The test can be done by comparing the calculated prob F value with an alpha error rate (0.05). If the calculated prob F value is less than 0.05, it can be concluded that the estimated regression model is feasible, whereas if the calculated F prob value is greater than 0.05, it can be concluded that the estimated regression model is not feasible.

c. Coefficient of Determination (R²)

The coefficient of determination aims to measure how far the model's ability to explain the variation of the independent variables in the study. The value of the determinant coefficient that is close to 1 means that the independent variables almost provide the information described for predicting the dependent variables.

Findings

Panel Data Multiple Regression Equation

The following are the results of the estimation of the effect of the HumanDevelopment Index (X1) and Economic Growth (X2) on Poverty (Y).

Table 2.1
Estimated Results

Dependent Variable: Y
Method: Panel Least Squares
Date: 09/25/21 Time: 13:23
Sample: 2014 2020
Periods included: 7
Cross-sections included: 27
Total panel (balanced) observations: 189

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	59.84625	3.039568	19.68906	0.0000
X1	-0.091765	0.020340	-4.511484	0.0000
X2	-0.719801	0.042661	-16.87249	0.0000

Based on table 2.1 above, it can be seen that the coefficient constants can be formed in the panel data regression equation as follows:

$$Y = 59.84625 - 0.091765 X1 - 0.719801 X2$$

The above equation can be interpreted as follows

- α is 59.84625, which means that if the Human Development Index (X1) and Economic Growth (X2) is zero, then poverty (Y) will be worth 59.84625 units.
- The regression coefficient of the Human Development Index (X1) variable is -0.091765, which means if there is a change in the Human Development Index (X1) increase of 1 unit (assuming other variables are constant), then Poverty (Y) will decrease by 0.091765 units.
- The regression coefficient of the Economic Growth variable (X2) is -0.719801 which means that if there is a change in the increase in Domestic Growth (X2) by 1 unit (assuming other variables are constant), then Poverty (Y) will decrease by 0.719801 unit.

Hypothesis test Simultaneous Effect

Provisions for simultaneous test decision making are if the calculated F value > Ftable or prob. (p-value) < 0.05 (significance level 5%), then H0 is rejected, which means that the independent variable has a significant influence on the dependent variable simultaneously. However, if the calculated F value < F table or prob. (p-value) > 0.05 (significance level 5%), then H0 is accepted, which means that the independent variable has no significant effect on the dependent variable simultaneously. Here are the results of the simultaneous test.

Table 2.2
Simultaneous Effect Results

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.965301	Mean dependent var	8.861164

Adjusted R-squared	0.959229	S.D. dependent var	3.142133
S.E. of regression	0.634453	Akaike info criterion	2.068197
Sum squared resid	64.40484	Schwarz criterion	2.565608
Log likelihood	-166.4446	Hannan-Quinn criter.	2.269710
F-statistic	158.9694	Durbin-Watson stat	1.674545
Prob(F-statistic)	0.000000		

Based on table 2.2, it is obtained that the value of prob. (F-statistic) of 0.000000 < 0.05; then H₀ is rejected, which means that the Human Development Index (X₁) and Economic Growth (X₂) simultaneously have a significant effect on Poverty (Y).

Partial Influence

Here are the partial test results:

**Table 2.3
Partial Influence Results**

Variabel	Sig.	Alpha	t hitung	t tabel	Kriteria Signifikansi
X ₁	0,000	0,05	-4,511848	2,06390	Signifikan
X ₂	0,000	0,05	-16.87249	2,06390	Signifikan

Based on table 2.3 it can be concluded that:

1. Hypothesis 1

The t count value of the Poverty variable (X₁) is -4.511848 with a p-value of 0.0000. Due to the value - t count < - t table or -4.511848 < -2.06390 or prob. (p-value) < 0.05 (significance level 5%) or 0.0000 < 0.05, then H₀ is rejected and it is concluded that the Human Development Index (X₁) has an effect on Poverty (Y).

2. Hypothesis 2

The t count value of the variable Economic Growth (X₂) is -16,87249 with a p-value of 0.0000. Due to the value - t arithmetic < - t table or -16.87249 < -2.06390 or prob. (p-value) < 0.05 (significance level 5%) or 0.0000 < 0.05, then H₀ is rejected and it is concluded that Economic Growth (X₂) has an effect on Poverty (Y).

Coefficient of Determination (R²)

This test is also useful for measuring the goodness and correctness of the relationship between variables in the model used. The value of R² ranges between zero and one. Closer to one, the closer the relationship between the independent and dependent variables. On the other hand, the closer R² is to zero, the more distant the relationship between the independent and dependent variables. The following is the result of calculating the value of R².

**Table 2.4
Coefficient of Determination**

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.965301	Mean dependent var	8.861164
Adjusted R-squared	0.959229	S.D. dependent var	3.142133
S.E. of regression	0.634453	Akaike info criterion	2.068197
Sum squared resid	64.40484	Schwarz criterion	2.565608
Log likelihood	-166.4446	Hannan-Quinn criter.	2.269710
F-statistic	158.9694	Durbin-Watson stat	1.674545
Prob(F-statistic)	0.000000		

Based on table 2.4, it can be seen that the value of the coefficient of determination R^2 is 0.965301 or 96.53%. This shows that the Human Development Index (X1) and Economic Growth (X2) have an effect on Poverty (Y) with an effect of 96.53%, while the remaining 3.47% is explained by other variables outside the study.

Conclusion

Based on the results of the discussion above, the Human Development Index (X1) affects Poverty (Y). According to Yani Mulyaningsih (2008) the human development index contains three important dimensions in development, which are related to aspects of meeting the needs for long life and healthy life to gain knowledge and have access to resources that can meet living standards. That is, the three important dimensions of influence in human development greatly affect poverty. The results of this study are supported by previous research by Prastyo examining the effect of economic growth, minimum wages, education, and unemployment on poverty in Central Java (Prastyo 2010). The analysis carried out is descriptive and econometric analysis using the Panel Data method. The results of this study indicate that the education variable has a negative effect on the poverty level. It is also consistent with the results of Estrada's research that the human development index partially has a positive and significant effect on the poverty level in the province of Bali for the 2009-2013 period (Estrada 2014). But it is not in accordance with the research of Laga Priseptian (2022). Based on the results of the study, HDI has a positive and insignificant effect on poverty. This shows that poverty in East Java has increased along with the increase in the human development index in East Java. But the increase in HDI is neither large nor significant. The results of this study indicate that HDI is not one of the determinants of poverty in East Java and also research from Syafullah & Malik that there is no significant effect between HDI and poverty (Syafullah 2017). Another study by M Palenewen et al. also showed that there was no significant effect on poverty (M Palenewen, 2018). Although the increase in HDI was driven by various government programs in the fields of health, education and economy in East Java, as well as improving the quality of infrastructure rather than human resources. The success of the program also depends on the community's perspective on the use of facilities and infrastructure (BPS East Java, 2021). Meanwhile, the variable Economic Growth (X2) has an effect on Poverty (Y). Economic growth is an indicator to see the success of development and is a necessary condition for reducing poverty levels. The adequacy requirement is that economic growth is effective in reducing poverty levels. This means that this growth should spread across all income groups, including the poor. Kuznet (2001) in (Arianti, F 2012) growth and poverty have a very strong correlation, because in the early stages of the development process the poverty rate tends to increase and when approaching the final stage of development the number of poor people gradually decreases. Wongdesmiwati stated that poverty reduction in Indonesia can be influenced by the real GDP growth rate and other supporting factors, such as investment through employment by the private sector and the government, technological developments that are increasingly innovative and productive, and population growth through increased human capital. Wongdesmiwati 2009). The results of this study are supported by previous research by Estrada that partial economic growth has a positive and significant effect on the poverty level in the province of Bali for the period 2009-2013 (Estrada 2014). However, according to Laga Priseptian's research (2022), economic growth has a negative and

insignificant effect on poverty. This shows that poverty in East Java has decreased along with increasing growth in East Java. But the increase in economic growth is neither large nor significant. The results of this study indicate that economic growth is not one of the determinants of poverty in East Java. This result is not in accordance with the theory of Sukirno (2011) which states that economic growth causes an increase in goods and services produced by the community and makes it prosperous.

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The Effect of Customer Service, Price, And Product Completeness To Customer Loyalty Cosmetics at Toko Kita Pontianak

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ABSTRACT: The objectives of this research are: (1) To determine the effect of customer service on customer loyalty of cosmetics at Toko Kita Pontianak (2) To determine the effect of price on the loyalty of cosmetic customers at Toko Kita Pontianak (3) To determine the effect of Fittings product on cosmetic customer loyalty at Toko Kita Pontianak.

This study used quantitative analysis. The total population of this study of all customers at Toko Kita Pontianak, the number of which is not known with certainty, who has bought cosmetics at Toko Kita Pontianak with a sample size of 100 respondents using purposive sampling technique. Data were collected by questionnaire with a scale likert. Uji requirements analysis using Linearitas test, Normality Test, heteroscedasticity test, Multicollinearity test.

The analytical method used is the Multiple Linear Regression Analysis, and hypothesis testing, R2 test (test the coefficient of determination), t test (partial) and F test (simultaneous). The author in conducting this research is to provide empirical evidence about the analysis of the influence of customer service, price, Fittings product on cosmetic customer loyalty at Toko Kita Pontianak

Keywords: Customer Service, Price, Completeness of Products, Customer Loyalty

Introduction

Local and foreign cosmetic companies are currently targeting Indonesia as their market share. For women today, cosmetics are a vital and main part of their daily lives, in order to obtain and maintain their beauty from time to time. Every cosmetic created and made certainly has its own distinct advantages to be able to meet the desires and needs of consumers. In Indonesia, various brands are now available from foreign and local cosmetic manufacturers. The purpose of this study was to determine the effect of customer service on cosmetic customer loyalty at Toko Kita Pontianak, to determine the effect of price on cosmetic customer loyalty at Toko Kita Pontianak and to determine the effect of product completeness on customer loyalty cosmetics at Toko Kita Pontianak. This research method is associative. Data collection techniques: questionnaires and documentary studies. The sample taken was based on the research criteria, namely the respondent had at least 2 purchases of cosmetics at the Kita Store Pontianak on Jalan Jenderal Sudirman with purposive sampling.

The results showed from the data analysis carried out with multiple regression that there was an effect of customer service, price and product completeness partially on cosmetic customer loyalty at Toko Kita Pontianak.

Facing today's highly competitive competition, companies are forced to be required to create a unique and superior image accompanied by the cultivation of a good and positive image of the goods/services issued in order to be competitive. Seeing the economic conditions and lifestyles of Indonesian people who are getting smarter and smarter and need new things for themselves, marketers must be smart and careful to attract consumer desires and interests by maintaining the existing market and developing their products so that they can dominate the market. Local and foreign cosmetic companies are currently targeting Indonesia as their market share. For women today, cosmetics are a vital and main part of their daily lives, in order to obtain

and maintain their beauty from time to time. Every cosmetic created and manufactured certainly has its own distinct advantages to be able to fulfill the desires and needs of its consumers. In Indonesia, various brands are now available from foreign and local cosmetic manufacturers. The growth of the original Indonesian cosmetic business industry whose development needs to be calculated and this is certainly driven by domestic market demand and exports which are increasing every year. This coincides with the lifestyle of the world community who uses body care and beauty products as basic and primary needs. The presence of various forms of cosmetics with various colors and unique packaging as well as their own advantages in function for consumers, requires the cosmetic industry to be increasingly triggered to develop new technologies that are not only intended for cosmetics themselves but also practicality / ease of use. The market *value* of the cosmetic business is very tempting, the increase in the cosmetic business is certainly driven by the increase in the use of cosmetic products in the country in line with the increase in people's purchasing power.

According to Adminlina (2021), the Ministry of Industry reported that in 2017, the cosmetics industry in the country reached more than 760 companies. Of this total, 95.00% of the national cosmetic industry is the SME sector or small and medium industries. Only about 5.00% is a large-scale industry. Our vast and large country Indonesia is one of the largest cosmetic markets so that it has a promising prospect for cosmetic businessmen. This potential for the domestic market is due, among other things, to the increasing population of the millennial generation. Based on data, the number of markets in Indonesia is 267 million people, with the demographics of a female population of 130 million people and around 68.00% are productive women. (Business .Com, February, 2020)

According to Haasiani (2021) The Covid-19 pandemic has made it difficult for many businesses to do business. Even so, not all of the existing sectors will be negatively/negatively affected. There are several business sectors that show positive growth in 2021. The cosmetics category is one of them. In 2021, it is even estimated that the cosmetic market in Indonesia will continue to grow. This can not be separated from the increasing number of people who have felt comfortable and easy *online -based shopping* for their cosmetic needs. In Indonesia, the beauty care industry is increasingly favored and loved by business people. These conditions and situations can and can be seen and detected from the high increase in sales data *in e-commerce* for the category of body care and beauty products. The beauty care category outperformed sales transactions in *e-commerce* by 46.8 percent. In addition, the total transaction value of the beauty care category in the market, especially *online -based*, has now managed to penetrate the Rp. 40 billion figure. Transactions in this cosmetic category alone in January 2021 had reached a value of Rp. 893 million in and it turned out that the highest sales of cosmetics were in the facial cosmetic category. (Compas.co.id. 25/03/2021).

Although currently *e-commerce purchases* are widely offered in recent years, it does not necessarily make all people like buying cosmetic products *online* . Several factors such as the same price as direct purchase, not to mention shipping costs and the length of the product delivery process as well as not being able to see various kinds of products directly and the absence of *chemistry* in the form of interaction between sellers and buyers in terms of communication about products which became this condition made people are less interested in shopping for cosmetics for daily needs *online* .

In general, loyalty is defined as repeated purchases made continuously on the same brand or in other words is the act of someone buying a brand, paying attention only to certain brands and not looking for information related to the brand. Loyalty is a behavior of repeat buying that turns into a habit, which has a high involvement (linkage) in its choice of a particular object and is characterized by unwillingness and reluctance to seek external information and evaluate alternatives. (Engel et al, 1993 in Sugiharto, 2005:39).

The existence of good and quality service makes customers feel happy and appreciated, so that customers will come back again and will certainly continue their business relationship with

the company. Then the customer will tell the goodness of the service obtained to other friends/colleagues. The role of a *customer service* can affect the growth of the company because good or bad customer service will affect customer loyalty to the company. Customer service (*customer service*) includes activities in providing the benefits of time and place, including during pre-transaction services, during transactions and even post-transactions. Activities before this transaction will also affect the activity or transaction activity and after the transaction and therefore, the preliminary activities must be carried out as well as possible so that consumers give a positive response and show high loyalty. (Lupiyoadi, 2001: 64)

These attributes or words in customer service can be abbreviated in the acronym COMPORT, namely *Caring* (care), *Observant* (likes to pay attention), *Mindful* (careful / careful), *Friendly* (friendly), *Obliging* (willing to help) and *Responsible* (responsible) and *Tactful* (wise) (Tjiptono, 2006: 57). These attributes of COMPORT definitely depend on interpersonal skills, communication, empowerment sensitivity, knowledge, understanding, and various external behaviors.

A cosmetic *customer service* commonly used by cosmetic companies is a woman who has an attractive physical character in an effort to attract the attention of consumers such as a beautiful face, agile and good *body language*, capable and good at communicating so that she can provide information or services related to cosmetic goods. products are traded in accordance with consumer needs. This is intended to attract potential buyers.

If the customer is very compatible with the product he uses, both in terms of price and benefits, it will lead to a loyal nature of the product without having to be told the customer will look for the product himself. Consumer perceptions of products are often influenced by price, high prices are usually considered to reflect high quality, especially in the *specialty products category*. According to Kotler and Armstrong (2012: 345): Price is the amount of money charged for a product or service, or the amount of value that customers exchange for the benefits of owning or using a product. According to Kotler and Armstrong, (2012: 318), there are four price indicators, namely price affordability, price suitability with product quality, price competitiveness and price suitability with benefits. According to Tjiptono (2008: 153) prices can also be set to prevent competitors from entering, maintain customer loyalty, support resale and others.

In addition to price, other factors that are also considered by consumers when they come to shop are the completeness of the products offered, the completeness here concerns the many types of products offered, the variety of sizes, the variety of brands and the availability of products every day. Seeing that many other cosmetic competitors have good product completeness, this will be a special concern for cosmetic shops to pay more attention to the availability of a brand in front of the general public's perception. Consumers can evaluate the same product differently depending on how evenly distributed the product is. Completeness of merchandise is an important factor to attract consumers. Even though the selling price is higher than other store markets, but because of the complete range of items being sold, the shop will attract a lot of visitors. If the customer enters the stage of making repeated purchases or the consumer becomes loyal. The completeness of the product plays a role in gaining the trust offered to help customers become loyal. So cosmetic shops must pay more attention to and improve the completeness of the types of products they will offer according to customer needs, starting from the brand, the diversity of these products so that customers remain loyal/loyal to shopping at this cosmetic store. According to Kotler (2002:347), product completeness is the availability of all types of products offered to be owned, used or consumed by consumers produced by a producer. According to Raharjani (2005:8), indicators of product completeness, namely: the variety of products sold, the variety of products sold, the availability of products sold and the kinds of brands available.

Toko Kita is a line of business selling beauty products and salon needs from various brands. Toko Kita is the most complete cosmetic distributor in Pontianak, selling various local and foreign cosmetic brands. Our shop is located at our shop, Pontianak, which is located at Jalan Jenderal *Sudirman* No.III, Darat Sekip Village, Pontianak City. Kita Pontianak shop is trying to maintain the loyalty of its customers by providing the services that every cosmetic customer wants.

To find out the cosmetic sales data in rupiah at Toko Kita Pontianak in 2018-2020, it can be seen in Table 1 below:

Table 1
Our Store's Cosmetic Sales Data
Year 2018-2020
(In rupiah)

Year	Total Sale	Percentage (%) Increase/Decrease
2018	6.955.056.742.00	-
2019	5,421,382,826.00	(22.05)
2020	6,347,692,405.00	17.09

Source: Toko Kita Pontianak, 2021

Based on Table 1, sales of cosmetic products at Toko Kita in 2019 decreased by 22.05 % compared to sales of cosmetic products in 2018, in 2020 it increased by 17.09% compared to sales of cosmetic products in 2019.

The cosmetic products sold at Toko Kita Pontianak are complete and varied and also provide various kinds of complementary cosmetic products from the main products sold such as Something, Luxcrime, Wardah, Rivera, Emina, You, Maybelline, Latulipe, N'pure, LT Pro, L'oreal, Pinkflash, Azarine, Pixy, Scarlett, Mizzu Cosmetic, Clarestacs, Garnier, Azzura, Inez, Revlon, Oriflame, La Tulipe, Fanbo, Lacoco, Bio Beauty, Sociolla, Make Over, Melanox, Matrix, Biokos, Sari Ayu dan etc.

Kita Pontianak shop is trying to maintain the loyalty of its customers by providing the services that every cosmetic customer wants. So that customers feel loyal to the services that have been provided by the store with customer service , pricing and completeness of products in meeting the needs of their clients. The phenomenon of the gap that occurs at this time is that consumers are more likely to choose cosmetic places that they consider comfortable in terms of customer service, fast service and always fulfill their desires with product quality, price and product completeness. The ability of service by reliable and well-known employees in handling any information problems complained of by customers so that customers feel cared for by the company and may be able to create customer loyalty so that in the future they intend to consume regularly and are willing to refer to others.

So customer service for a cosmetic shop is an important factor in order to retain customers. The better the customer service of a cosmetic store, the more it meets the needs and desires of customers. In addition to customer service, product completeness and prices affordable by customers are considerations that affect the level of customer loyalty to make continuous purchases at a cosmetic store.

The studies from previous research are: Pribadi et al (2013), the results of the study show that there is a strong influence of customer service on customer loyalty. Rahayu (2017) research results show that the price variable has a positive and significant effect on customer loyalty and Aristina (2021), the results of his research show that product completeness has a positive and significant effect on customer loyalty.

Based on the problems above, the authors are interested in reviewing and conducting research with the title " **The Effect of Customer Service, Price and Product Completeness on Cosmetic Customer Loyalty at Toko Kita Pontianak .**

Literatur

1. Cosmetics

a. Definition of Cosmetics

According to the Food and Drug Supervisory Agency (BPOM) in the Regulation of the Head of the Food and Drug Supervisory Republic of Indonesia Number HK.33.1.23.08.11.07331 of 2011 concerning Cosmetic Analysis Methods that cosmetics are ingredients (preparations) whose purpose is to be used outside the human body such as nails, hair, epidermis, lips and external genital organs or teeth, mouth, especially can clean, perfume and change appearance and protect and improve body odor or keep the body in good condition.

2. Customer service (*Customer Service*)

According to Rusydi (2017:2) "*Customer service* is an effort to provide *service* to customers in accordance with the agreed work agreement". Meanwhile, according to Majid (2009: 34) explains; "*Customer service* is the science and art of *marketing* or sales, meaning that *customer service* really needs elements of ideas, initiative, creativity and intelligence or skills in dealing directly with other people. So, customer service is a science as well as an art in serving other people or customers."

Customer service (*customer service*) is a principle that can describe the condition of customers by comparing the service they expect with what they receive in filtering quality. Good service quality is one of the important points in business and efforts to create customer loyalty. Service can be said to be of good quality and good if the services provided by a company can satisfy its consumers or customers. Therefore, the quality of service can be said to have capacity and quality if it makes customers feel satisfied with the services that have been provided by the company so that it can directly make consumers loyal and will remain loyal to the company. In addition, good service will be able to play a role in changing the *image* by distributing more complete information. Communication efforts in this case change the previous *image*. Strictly speaking, through communication the *image* is improved to become more elastic (Siahaan, 1991: 8).

Based on the understanding of customer service (*customer service*) the author can conclude that *customer service* is an employee who is deliberately formed by the organization/company in serving customers well in order to provide satisfaction and ultimately create loyalty to the company's business products.

customer service attributes can be abbreviated in the acronym COMPORT, namely Caring (care), *Observant* (likes to observe or pay attention), *Mindful* (careful or careful), *Friendly* (friendly), *Obliging* (willing to help), *Responsible* (responsibility), and *Tactful* (kind / wise)". These attributes are highly dependent on the skills and skills of interpersonal relationships, knowledge, communication, empowerment, understanding, sensitivity and various kinds of external behavior.

3. Price

According to Tjiptono (2012: 27) price is a monetary unit or other measure (including other goods and services) that are exchanged in order to obtain ownership rights or use of an item or service. Price is something that must be given to consumers to get the advantages offered by the company. Price is the single most decisive element for companies to earn revenue. In addition, price is the most flexible element in the marketing mix element. Price is also the most important and complicated factor faced by company managers so that pricing is the most important problem that must be faced by executives (Budianto, 2015: 257). So it can be interpreted that the price is a sum of money as a medium of exchange to obtain products or services.

According to Stanton (2010: 25) there are four indicators in the price, namely:

a. Price affordability

Price is a determining factor in buying goods. Goods must be adapted to the market and according to the level of the community's economy. High prices are not a determinant of consumers to make purchases. Marketers must be able to offer products that are accessible to the public so as to generate greater profits for marketers.

- b. Price competitiveness
Price is often a consideration for buyers. The price of a product must be able to compete with other products. Price competition needs to be done so that consumers dare to choose to make purchases according to their needs. Competitors must match the market price.
- c. Price match with product quality
The price offered should be in accordance with the quality of the products offered so that consumers do not feel cheated by the products they buy. The high price does not mean that it is an option that the quality of the product is high and vice versa.
- d. Price match with benefits
The benefits of a product make consumers want to have a product more than other products. Price is not a problem in getting higher products

From the various descriptions and explanations above, it can be concluded that there are four price indicators, namely price affordability, price conformity with product quality, price competitiveness and price suitability with benefits. According to Tjiptono (2008:153) prices can also be set to prevent competitors from entering, maintain customer loyalty, support resale and others .

4. Product Completeness

According to Ma'ruf (2005:135) product completeness is the activity of procuring goods that are in accordance with the business the store is running (food-based products, clothing, household goods, general products, etc. or a combination) to be provided in the store on the right amount, time, and price to achieve the store's or company's goals.

According to Engel et al (2010: 267) product completeness is divided into several indicators, namely:

- a. Product diversity
- b. Product brand variations
- c. Product size variations
- d. Product quality variations

According to Raharjani (2005: 8), the product completeness variable includes the variety of goods sold in supermarkets and the availability of these goods in supermarkets. Indicators of product completeness, namely:

- a. Diversity of products sold
- b. Variety of products for sale
- c. Availability of products for sale
- d. Types of brands available

According to Raharjani (2005: 6) that consumers in choosing which supermarket to visit by considering whether or not the products sold at the supermarket are complete, if there is a more complete supermarket even though the distance is a bit far, consumers will visit a supermarket that has more complete products. . In addition, according to Swastha and Irawan (2002:122), the factors that affect loyalty is one of them is the diversity of goods offered to customers in the store. With a good completeness/diversity of products, it will be easier for consumers to choose and buy various kinds of products according to their wishes and do not need to look elsewhere.

5. Customer Loyalty (Customer Loyalty)

will voluntarily preach and recommend products to others, although not necessarily they are still customers of the company's products. According to Gremler & Brown in Hasan (2008:83), customer loyalty or loyalty is a customer who not only repurchases a product consisting of goods and services, but also has a positive commitment and attitude to service companies, for example by recommending others. or acquaintances to buy the product.

From the various opinions above, it can be concluded that customer loyalty is a person's loyalty to remain a customer of a particular company, where the customer has a good/positive attitude

towards a brand and has a commitment to the brand and aims to continue his purchase in the future and the stage of using the facility. and services provided.

According to Griffin (2005:31), customer loyalty in relation to purchasing behavior is recognized:

- a. Make repeat purchases regularly
Customers repurchase the same product (goods/services) offered by the company.
- b. Make purchases between product lines
Customers make purchases between product lines (goods/services) offered by the company.
- c. Referring to others
Customers communicate by word of mouth regarding the product (goods/services) to other people.
- d. Demonstrate immunity to the pull of competitors
Customers are not interested in offering similar products produced by competitors (competitors).

Research Method

In that case, research is used methods that are appropriate and in accordance with research a society. The associative research method according to Sugiyono (2013: 11) is: "Research that aims to find out the influence and relationship between 2 or more variables". In this study, the associative method was used to determine the effect of customer service, price and product completeness on customer loyalty. The form of this research uses a survey, namely to determine the effect of variables X to variable Y.

The population in this study are all customers at Toko Kita Pontianak Jalan Jenderal Sudirman, the number of which is not counted/unknown with certainty who has ever bought cosmetics at Toko Kita Pontianak. The research sample taken in this study was only 100 respondents . The sampling technique used is *purposive sampling* , namely the sample is selected by criteria. According to Sugiyono (2013: 228-229), namely: *purposive sampling* is a way of taking samples from data sources with certain considerations ". The sample was taken based on the research criteria, namely the respondent had at least 2 purchases of cosmetics at Toko Kita Pontianak on Jenderal Sudirman street . The types of data in research can be grouped into the main things, namely qualitative and quantitative data. As long as the research is conducted in institutions and quantitative data is data in the form of numbers or qualitative data that is numbered, namely data analysis using statistical formulas. The use of numbers makes it easier to interpret the results objectively. The data sources used in this research are :

a. Primary data

Sources of data used in this study are customer respondents' responses obtained through questionnaires about the effect of customer service, price and product completeness on cosmetic customer loyalty at Toko Kita Pontianak, Jalan Sudirman Pontianak.

b. Secondary Data

Secondary data is documentation data obtained directly from organizations/institutions related to this research. In this research, secondary data is obtained by collecting document/record data that are related and relevant to the problem to be studied . The secondary data in this study comes from data on the sales of cosmetics at Toko Kita Pontianak 2018-2020.

The order of variables in the discussion of this research are: The order of variables in the discussion of this research are:

Customer Service (Customer Service) (X 1)

- 1) Caring (care).

- 2) Observer (likes to pay attention),
- 3) Mindful (careful / careful)
- 4) Friendly (friendly)
- 5) Obliging (willing to help)
- 6) Responsible (responsible)
- 7) Tactful (wise)

Price (X 2)

- 1) price affordability,
- 2) Price match with product quality,
- 3) Price competitiveness
- 4) Price match with benefits

Product accessories (X 3)

- 1) Diversity of products sold
- 2) Variety of products for sale
- 3) Availability of products for sale
- 4) Types of brands available.

Customer Loyalty (Y)

- 1) Make repeat purchases regularly
- 2) Make purchases across product and service lines
- 3) Referring to others
- 4) Demonstrate immunity to the pull of competitors

Data Analysis Method

Quantitative data analysis is data analysis that uses data in the form of numbers obtained as a result of measurement or summation (Nurgiyantoro et al, 2004:27). To answer the next problem, it is adjusted to the hypothetical model, where to test the hypothesis of this study used:a .

The validity test intends to measure the validity of a statement item . The technique used to test the validity of the instrument in this study is to correlate the score of each question/statement in the questionnaire with the total score using the *product correlation formula* . According to Ghozali (2015: 52) : " This validity test is used to measure the accuracy and validity of the existing data from each of the questionnaire questions used (used). A questionnaire that has a level of validity if the questions from the questionnaire have the ability to reveal and reveal something that will be measured by the questionnaire. The questionnaire can be said to be valid if $r_{count} > r_{table}$. The *product moment correlation value* will then be compared with a correlation value of 0.30 with a significance level (α) = 0.05 and the amount of data (n) = 10 0. The decision criterion is if $r_{count} > 0.30$, then the statement is declared valid and if $r_{count} < 0.30$ then the statement is declared invalid.

b . reliability test

According to Sekaran (2006) in Sarjono and Julianita (2011:35): "Reliability *is* a measurement method that shows and shows the extent to which the measurement is carried out without bias. Therefore, it is necessary to ensure and guarantee consistent measurements across time and across various items in the instrument. In testing for reliability in this study using *Cronbach's Alpha* with the help of the SPSS program. The reliability test can be carried out simultaneously on all existing questions and if the *Cronbach alpha value* > 0.60 then the other values are reliable and if the *Cronbach alpha value* < 0.60 is considered unreliable.

c. classic assumption test

1) Test Linear

According to Sarjono and Julianita, (2011: 74): "This test has the purpose of knowing whether the existing data is in accordance with a linear line or not (whether the relationship between the variables to be analyzed follows a straight line or not). Of course, the rise and fall of the quantity in one variable will be followed directly by the rise and fall of the quantity in the other variable. (Linear = straight line)".

According to Sarjono and Julianita, (2011: 80) the basics in making decisions on the linearity test are:

- a) If the significance of Deviation from Linearity > 0.05 then the relationship between variables is linear.
- b) If the significance of Deviation from Linearity < 0.05 then the relationship between variables is not linear.

2) Normality Test

According to Sarjono and Julianita (2011:53): "This test is to determine whether a data distribution is normal or not. Basically , the normality test is to compare the data that is owned and the data is normally distributed which has a *mean* value as well as the standard deviation value is the same as the data". The normality test used is the Kolmogorov-Smirnov test.

According to Sarjono and Julianita (2011: 64), the test criteria are as follows :

- a) The significance value of the Kolmogorov Smimov Sig test > 0.05 indicates that the data is normally distributed
- b) The significance value of the Kolmogorov Smimov Sig test < 0.05 indicates that the data is not normally distributed.

3) Heteroscedasticity Test

This test is to test whether in the regression model there is an inequality of variance from one observation to another (Ghozali, 2008:99). Seeing whether there is a certain pattern on the *Scatterplot graph* between SRESID and ZPRED where the Y axis is Y which has been previously estimated and the x axis is the residual (Y predicted - Y real) that has been *studied* (Ghozali, 2008:99).

4) Multicollinearity

According to Sarjono and Julianita, (2011: 70): "This test is to detect whether the correlation between the independent variables has multicollinearity symptom problems or not. Multicorrelation describes the measure value of a very high or very low correlation relationship that exists in the relationship between the existing independent variables. Multicollinearity test needs to be done if the number of independent variables is more than one.

According to Sarjono and Julianita, (2011: 74), the basis for making these decisions are:

- a) If the value of VIF < 10 , it means that there is no multicollinearity between the independent variables.
- b) If the VIF value > 10 , it means that there is multicollinearity between the independent variables.

c. Model Fit Test

The suitability test of this model is used and used to measure the capacity of the explanatory variables to explain the variation and diversity of the endogenous variables in each of these equations.

- a) Multiple Correlation Coefficient Test (R)

According to Sarjono and Julianita (2011:85): "This analysis looks at whether or not there is a correlation between one variable and another variable". The method used to calculate the correlation coefficient is using the *product moment* .

To determine the level of relationship in the correlation can be seen in Table 2 , as follows:

Table 2
Guidelines and Interpretation of the Value of r

Coefficient interval	Relationship Level
0.80-1,000	Very strong
0.60-0.799	Strong
0.40-0.599	Strong enough
0.20-0.399	Low
0.00-0.199	Very low

Source: Riduwan (2005) in Sarjono and Julianita (2011: 90)

b) Coefficient of Determination Test (R^2)

According to Siregar (2015: 252), the coefficient of determination is a number of values that state to find out the contribution or contribution given by an independent variable (X) to the dependent variable (Y) .

c) F . test

According to Ghozali (2015: 98), the F statistical test basically guarantees whether all independent variables included in the model have a joint influence on the dependent variable. The degree of confidence used is 0.05 . If the F value is greater than the F value in the F table, then H_0 is rejected, which states that all independent variables simultaneously have a significant effect on the dependent variable or it can be said that if $F_{count} > F_{table}$, then H_0 is rejected & H_a is accepted. On the other hand, if the calculated F value $< F_{table}$, then H_0 is accepted and H_a is rejected.

d) Partial Effect Test (t Test)

According to Siregar (2015: 410), the t test is used to measure separately the impact of each independent variable (free) on the dependent (bound) variable. The partial effect test in this study is used to determine whether there is a partial effect between the independent variables consisting of customer service (X_1), price (X_2) and product completeness (X_3), on customer loyalty cosmetics at Toko Kita Pontianak (Y).

calculated t value is compared with the t value obtained from the *t distribution table* with $\alpha = 0.05$ (two-party test) with $dk = n-2$ which can draw the acceptance and rejection areas with the two-party test.

The criteria are as follows:

- If t is calculated \geq from the t table , then H_0 is rejected and H_1 is accepted.
- If t is calculated $<$ from the t table , then H_0 is accepted and H_1 is rejected.

Analysis Results

From the results of the survey and the answers to the questionnaire, the characteristics of the respondents are as follows: most of the respondents have been customers of cosmetics for 3-4 years at Toko Kita Pontianak, female, aged 17-26 years.

Uji Validitas

The results of the validity test of the questions in the variables show that the calculated r value of each item of the consumer service variable, price, product completeness and consumer loyalty is declared valid because it is greater than 0.30 and can be used as a measuring tool for each variable.

Table 3
Validity test

variable	Items	r_{count}	r_{table}	Information
Customer service (X_1)	Item 1	0.548	0.30	Valid
	Item 2	0.650		Valid
	Item 3	0.635		Valid
	Item 4	0.668		Valid
	Item 5	0.733		Valid
	Item 6	0.535		Valid
	Item 7	0.707		Valid
Price (X_2)	Item 1	0.550	0.30	Valid
	Item 2	0.787		Valid
	Item 3	0.557		Valid
	Item 4	0.794		Valid
	Item 5	0.879		Valid
	Item 6	0.750		Valid
	Item 7	0.711		Valid
Product Accessories (X_3)	Item 1	0.606	0.30	Valid
	Item 2	0.702		Valid
	Item 3	0.699		Valid
	Item 4	0.553		Valid
	Item 5	0.633		Valid
	Item 6	0.698		Valid
	Item 7	0.469		Valid
Consumer Loyalty (Y)	Item 1	0.413	0.30	Valid
	Item 2	0.460		Valid
	Item 3	0.615		Valid
	Item 4	0.773		Valid
	Item 5	0.710		Valid
	Item 6	0.700		Valid
	Item 7	0.734		Valid

Source: Primary Data Processed, 2022

Table 3 above can be seen that the validity test shows that the calculated r value for each item of the customer service variable, price, product completeness and customer loyalty is declared valid because it is greater than 0.30 and can be used as a measuring tool for each variable .

Reliability Test

Reliability is a measurement method that shows and shows the extent to which the measurement is carried out without bias. Therefore, it is necessary to ensure and guarantee consistent measurements across time and across various items in the instrument. In testing for reliability in this study using *Cronbach's Alpha* with the help of the SPSS program. The reliability test can be carried out simultaneously on all existing questions and if the *Cronbach alpha value* > 0.60 then the other values are reliable and if the *Cronbach alpha value* < 0.60 is considered unreliable.

To test the reliability on questions in the variables of customer service, price, product completeness and customer loyalty can be seen in Table 4 below:

Table 4
Reliability Test Results

Variable	Alpha Cronbach	Standard Reliability	Information
Customer service	0.761	0.60	Reliable
Price	0.850	0.60	Reliable
Product Accessories	0.727	0.60	Reliable
Customer loyalty	0.747	0.60	Reliable

Source: Primary Data Processed, 2022

Table 3 above explains that the *Cronbach Alpha . value* (α) all variables are greater than 0.60 so it can be concluded that the indicators or questionnaires used such as customer service variables , prices, product completeness and customer loyalty are all declared to be reliable as variables measuring instruments.

Hypothesis test

a. Classic assumption test

1) Linearity Test

This test aims to determine whether the two variables have a linear relationship or not significantly. Testing the SPSS 17.0 for Windows program using the Test for Linearity with a significant level of 0.05. According to Priatno (2008:36), two variables are said to have a linear relationship if the significance (Linearity) is less than 0.05.

Table 5
Linearity Test Results

Variable	linearity	Alpha	Information
X ₁ - Y	0.000	< 0.05	linear
X ₂ - Y	0.000	< 0.05	linear
X ₃ - Y	0.000	< 0.05	linear

Source: Processed data, 2022 (Appendix)

It can be seen that the significance value for linearity is 0.000. So the significance value is less than 0.05 ($0.000 < 0.05$), it can be concluded that there is a linear relationship between customer

service and customer loyalty, price and customer loyalty, as well as product completeness and customer loyalty.

2) Normality

Normality test intends to test whether in the regression model, the confounding variable (residual) has a normal distribution. The normality test used in this study is the Kolmogorov-Smirnov significance test.

Test criteria: if the significance number of the Kolmogorov-Smirnov Sig test > 0.05 shows the data is normally distributed, while if the significance number is the Kolmogorov-Smirnov Sig test < 0.05, it shows that the data numbers are not normally distributed. The results of the normality test obtained in this study can be seen in Table 6 below:

**Table 6
Normality test**

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Customer service	,243	7	,200 *	,917	7	,446
Price	,221	7	,200 *	,878	7	,217
Product Accessories	,193	7	,200 *	,905	7	,359
Customer loyalty	,237	7	,200 *	,931	7	,562

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Processed Data, Year 2022 (Appendix)

It is known that the significance number of the Kolmogorov-Smirnov Sig test for the four variables, both customer service, price and product completeness and customer loyalty at the Pontianak Cosmetics Shop is normally distributed.

4) Test Heterokedastitas

Heteroscedasticity test is used to test whether in the regression model there is an inequality of variance from the residuals from one observation to another. A good regression model is the absence of heteroscedasticity. Heteroscedasticity testing method can be done with a scatter plot (prediction value of ZPRED with residual SRESID). The results of the heteroscedasticity test in the regression model in this study can be seen in Figure 1 below:

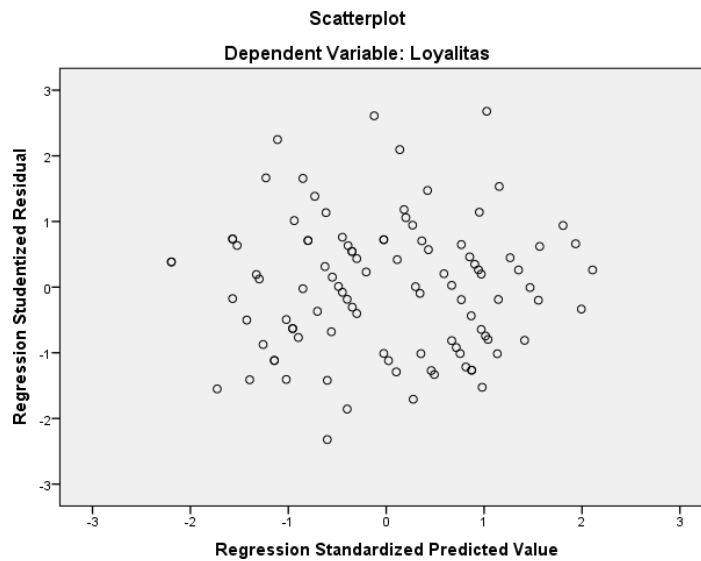


Image 1
SCATER PLOT REGRESSION MODEL

Source: SPSS processed data, 2022 (Appendix)

From the figure it is known that the points spread with an unclear pattern, above or below zero on the Y axis, so it can be concluded that there is no heteroscedasticity problem in the regression model.

4) Multicollinearity

According to Sarjono and Julianita, (2011: 70): "This test is to detect whether the correlation between the independent variables has multicollinearity symptom problems or not. Multicorrelation describes the measure value of a very high or very low correlation relationship that exists in the relationship between the existing independent variables. Multicollinearity test needs to be done if the number of independent variables is more than one.

The results of the multicollinearity test of the variables of customer service, price and product completeness on customer loyalty Cosmetics at Toko Kita Pontianak can be seen from Table 7 below:

Table 7
Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Customer service	0.439	2,280
	Price	0.598	1,673
	Product	0.442	2,265
	Accessories	0.442	2,265

a. Dependent Variable: Loyalty

Source: 2022 processed data (attachment)

Based on the results of multicollinearity testing on customer service on *loyalty*, *VIF* is 2.280, because the *VIF* value is $2.280 < 10$, then there is no multicollinearity in the regression model. Multicollinearity test results on price on loyalty obtained *VIF* 1.673 because the value of *VIF* $1.673 < 10$, then there is no multicollinearity in the regression model. While the results of

multicollinearity testing on product completeness on loyalty obtained a *VIF* of 2.265 because the value of *VIF* is $2.265 < 10$, so there is no multicollinearity in the regression model.

5) Regression results, regression equations and explanations

The results of the regression analysis are in the form of coefficients for each independent variable. This coefficient is obtained by predicting the value of the dependent variable with an equation of the customer service variable , price, product completeness on cosmetic customer loyalty at Toko Kita Pontianak, which is taken from the results of data processing can be seen in Table 8 the following :

Table 8
Linear Regression Estimation Results
Coefficients ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.184	0.186		0.988	0.326
1 Customer service	0.259	0.059	0.278	4,402	0.000
Price	0.234	0.053	0.238	4,400	0.000
Product Accessories	0.597	0.073	0.518	8,224	0.000

a. Dependent Variable: Loyalty

Source: Processed Data with SPSS 20 Year 2022 (attachment)

$$Y = 0.278X_1 + 0.238 X_2 + 0.518 X_3$$

Based on the regression equation above, it can be explained that:

- a) Regression coefficient of customer service variable (X_1) = 0,278 , it means an increase in customer service (X_1) will result in an increase in customer loyalty of cosmetics at Toko Kita Pontianak .
- b) The coefficient of regression of the price variable (X_2) = 0,238 , it means an increase in price (X_2) will result in an increase in customer loyalty of cosmetics at Toko Kita Pontianak .
- c) Regression coefficient of product completeness variable (X_3) = 0.518 , meaning that the increase in product completeness (X_3) will result in an increase in customer loyalty for cosmetics at Toko Kita Pontianak .

c . Test of s e s u a i a n M o d e l

1) Analysis of the Coefficient of Determination (R^2)

The coefficient of determination is a number of values that indicate to know the contribution or contribution given by an independent variable (X) to the dependent variable (Y) . The purpose of this research is to find out how much the contribution of customer service , price, product completeness to variations in the ups and downs of cosmetic customer loyalty at Toko Kita Pontianak . The contribution of influence is expressed as a percentage (%). The value of the coefficient of determination (R^2) obtained in this study can be seen in Table 9 below:

Table 9
Coefficient of Determination Value (R^2) Estimation Results
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,912 _a	,832	,827	,16857	2,068

a. Predictors: (Constant), Product Completeness, Price, Consumer Service

b. Dependent Variable: Loyalty

Source: Processed Data, Year 20 22 (Appendix)

From Table 8 it can be seen that the value of the coefficient of determination (R^2) obtained is 0,827. This means that the effect of customer service, price, product completeness on the variations in the ups and downs of cosmetic customer loyalty at Toko Kita Pontianak is 82.70%. The value of 0.827 is the value of *Adjusted R Square* because the independent/dependent variables in the data are more than 2 variables.

While the analysis of the correlation coefficient (R) in this study was used to determine the strength of the relationship between the influence of customer service, price, product completeness on variations up and down cosmetic customer loyalty at Toko Kita Pontianak. The value of the correlation coefficient (R) obtained is 0,912 if this value is compared with the standard r value, it can be concluded that the relationship between customer service, price, product completeness and customer loyalty is very strong because it is in the range of 0.800-1,000. This means that if customer service, prices, product completeness increase, the loyalty of cosmetic customers at Toko Kita Pontianak will increase as well.

2) F test

The F test is used to determine whether the independent variables simultaneously have a significant effect on the dependent variable. The calculated F value obtained in this study can be seen in Table 10 below:

Table 10
Calculate F value Estimation Results
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13,511	3	4,504	158,485	,000 ^b
	Residual	2,728	96	0.028		
	Total	16,239	99			

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Product Completeness, Price, Consumer Service

Source: Processed Data, Year 20 22 (Appendix)

It is known that F table with numerator $dk = m = 3$; dk denominator = $nm-1 = 100-3-1 = 96$ and $\alpha = 0.05$ and the value obtained from table F is 2.70.

Conclusion: $F_{count} > F_{table}$ ($158,485 > 2,70$), so H_0 is rejected. Another way to determine the accuracy of the above model is by comparing the probabilities. If the probability > 0.05 then the model is accepted and if the probability is < 0.05 then the model is rejected. It can be seen that the value (sig) is $0.000 < 0.05$, meaning that customer service, price, product completeness simultaneously have a significant influence on cosmetic customer loyalty at Toko Kita Pontianak

3) t test

The t-test basically shows how far the influence of one independent variable individually in explaining the variation of the dependent variable. The partial effect test (t test) in this study was used to determine whether or not there was a significant effect of customer service (X₁), price (X₂), product completeness (X₃) partially (individually) on cosmetic customer loyalty at Toko Kita Pontianak (Y).

The test method is to compare the value of t count with t table with the decision criteria if t count \geq t table, then H₀ is rejected and H₁ is accepted. On the other hand, if t count < t table, then H₀ is accepted and H_a is rejected.

The calculated t value in this study can be seen in Table 11 below:

Table 11
t value of Regression Estimation Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.184	0.186		0.988	,326
Customer service	0.259	0.059	0.278	4,402	0.000
1 Price	0.234	0.053	0.238	4,400	0.000
Product Accessories	0.597	0.073	0.518	8,224	0.000

a. Dependent Variable: Loyalty

Source: Processed Data, Year 2022 (Appendix)

Partial effect test can be described as follows:

- a) Customer service impact (X₁) Partially (individually) on cosmetic customer loyalty at Toko Kita Pontianak can be seen in the t value = 4.402 (in Table 10) and the t table value with degrees of freedom (dk) = n-2 = 100-2 = 98 and $\alpha = 0,05$ is equal to ± 1.98447 rounded 1.98 (in the t distribution table). In conclusion: t arithmetic > table (4,402 > 1,98), so H₀ is rejected and H₁ is accepted. This means that customer service partially has a significant effect on cosmetic customer loyalty at Toko Kita Pontianak. This can also be seen from the level of significance of the customer service variable (X₁) of 0.000 which is smaller than 0.05 (0.000 < 0.05).
- b) Price effect (X₂) Partially (individually) on cosmetic customer loyalty at Toko Kita Pontianak, it can be seen in the t value = 4,400 (in Table 10) and the t table value with degrees of freedom (dk) = n-2 = 100-2 = 98 and $\alpha = 0,05$ is equal to ± 1.98447 rounded 1.98 (in the t distribution table). In conclusion: t arithmetic > table (4,400 > 1,98), so H₀ is rejected and H₂ is accepted. This means that the price partially has a significant effect on the loyalty of cosmetic customers at Toko Kita Pontianak. This can also be seen from the level of significance of the price variable (X₂) of 0.000 which is smaller than 0.05 (0.000 < 0.05).
- c) Effect of product completeness (X₃) Partially (individually) on the loyalty of cosmetic customers at Toko Kita Pontianak can be seen in the t value = 8,224 (in Table 10) and the t table value with degrees of freedom (dk) = n-2 = 100-2 = 98 and $\alpha = 0,05$ is equal to ± 1.98447 rounded 1.98 (in the t distribution table). In conclusion: t count > table (8,224 > 1,98), so H₀ is rejected and H₃ is accepted. This means that the completeness of the product partially

has a significant effect on the loyalty of cosmetic customers at Toko Kita Pontianak. This can also be seen from the significance level of the product completeness variable (X_3) of 0.000 which is smaller than 0.05 ($0.000 < 0.05$).

Conclusion

Based on the results of data analysis and discussions that have been carried out, the following conclusions can be drawn:

1. There is the influence of customer service (X_1) Partially (individually) on cosmetic customer loyalty at Toko Kita Pontianak, it can be seen from the level of significance of the customer service variable (X_1) to customer loyalty of 0.000 which is smaller than 0.05 ($0.000 < 0.05$) so that H_0 is rejected and H_1 is accepted. This shows that if customer service increases, the loyalty of cosmetic customers at Toko Kita Pontianak will also increase.
2. There is a price effect (X_2) partially (individually) on the loyalty of cosmetic customers at Toko Kita Pontianak, it can be seen from the level of significance of the price variable (X_2) to customer loyalty of 0.000 which is smaller than 0.05 ($0.000 < 0.05$) so that H_0 is rejected and H_2 is accepted. This shows that if As the price variable increases, the loyalty of cosmetic customers at Toko Kita Pontianak will also increase.
3. There is an effect of product completeness (X_3) partially (individually) on cosmetic customer loyalty at Toko Kita Pontianak, it can be seen from the level of significance of the product completeness variable (X_3) on customer loyalty of 0.000 which is smaller than 0.05 ($0.000 < 0.05$) so that H_0 is rejected and H_3 is accepted. This shows that if product accessories increases, the loyalty of cosmetic customers at Toko Kita Pontianak will also increase.
4. There is a simultaneous influence of customer service, price, product completeness which together have a significant influence on cosmetic customer loyalty at Toko Kita Pontianak. It can be seen that the value (sig) is $0.000 < 0.05$.

Suggestion

Based on the research findings, it can be concluded some suggestions as follows:

1. It is better to increase the sense of responsibility for the information of Toko Kita cosmetics employees for cosmetic products that are recommended and informed, providing correct information and not just for the sake of achieving product sales targets.
2. It is hoped that the treatment of cosmetic employees at Toko Kita in providing services to be even more optimal, such as trying to explain, inform and respond to customers who have various kinds of characters or behaviors, in the hope of satisfying their wants and needs for various product information by mastering the usability well. and the benefits of the product properly and correctly to be conveyed back to consumers in a clear and easy to understand manner.
3. The need to improve some things that are already considered good, such as product prices vary according to product size, product prices are in accordance with product quality, product prices are competitive compared to other cosmetic stores, product prices are in accordance with the benefits and product prices provided provide usefulness and convenience. a good function according to consumer expectations and most importantly in pricing so that it is considered more able to provide satisfaction to customers so that it can affect their loyalty by providing detailed explanations of product price increases at this time.

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DECISION ANALYSIS TO DETERMINE BEST ALTERNATIVES TO DEVELOP ANEW DISCOVERY “R FIELD”

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Novani, Bandung Institute of Technology

In Indonesia, oil, gas, and coal are the largest main sources of energy. The oil and gas upstream industry has the considerable responsibility to supply such sources by the production of oil and gas. PERTAMINA, as the largest energy company in the country, has several upstream subsidiaries including PERTAMINA EP which is the company tasked with the sourcing of oil and gas. PERTAMINA EP in Zone 7 is short of gas supply for buyers in the area, notwithstanding exploration activities in R field which in 2019 discovered proven potential gas layers and one potential oil layer. This discovery was expected to fulfill the energy demand in the area, however since discovery in 2019 there has been no development activity in the field and this has become an issue to be resolved.

The objective of this paper is to determine the root cause of the undeveloped potential in R field and generate a decision analysis to determine the best alternative to be implemented in R field. Several methods were used to determine the root cause, generate alternatives, and define the solution.

The research followed a six-step problem solving process. It started with the SWOT Analysis to define the business situational analysis and the Kepner-Tregoe Method to determine the root cause of the problem. It was then followed by Value Focused Thinking method to determine the desired goals. Brainstorming sessions to provide the alternatives were also conducted. The alternatives were then validated using reservoir dynamic simulation model and forecasted. The SMART Method and economical parameter comparison using PSC Model was applied to select the best solution.

From brainstorming, 9 alternatives were generated, which after filtering by the SMART method resulted in 4 best alternatives. 1 do-nothing scenario, 2 oil layer development scenario, and 1 gas development scenario. From profitability parameter calculations using PSC model only 1 scenario met the definition for a profitable scenario: to develop the oil layer using only the existing well without additional drilling.

It is this scenario that will be recommended to be implemented in R field. Instead of developing the discovered gas layer in this new field, the oil layer should be developed for better profitability and higher feasibility of implementation. This conclusion is a product of a comprehensive approach from subsurface considerations to surface facility study and economic considerations (profitability) which should have been conducted earlier at the end of exploration phase. R field which was initially identified as a gas discovery field is shown to bring higher profit for the company by developing the oil layer.

Keywords: undeveloped potential, Kepner-Tregoe, SMART method, Value Focused Thinking, reservoir dynamic simulation

Background

The total energy consumption in Indonesia is on an increasing trend (Appendix 1). Oil (~35%), coal (~40%), and gas (~20%), are the dominant sources to supply the energy demand. As demand for energy will stay on an increasing trend for years to come, the oil and gas upstream industry has the considerable responsibility to supply the sources by producing oil and gas. PERTAMINA, as the biggest energy company in the country has several upstream subsidiaries, including PERTAMINA EP. To create sustainable production of oil and gas, sustained oil and gas reserves are strongly required. They are not renewable resources and reserves are on a decline as production ramps up. Therefore, new proven discoveries from exploration activities are needed to replace the produced reserve. R field is the new proven discovery found by exploration well R-001 (Appendix 2). It has proven gas reserves as well as oil and it is identified as a discovered gas field.

At the same time PERTAMINA EP Zone 7 is experiencing gas shortages in supplying demand in the area. (Appendix 3). In the graph, demand is shown by the bar graph and supply shown by the area behind the bars. The problem lies in the grey area which is the shortfall between supply and demand. This shortfall will happen in the upcoming year 2023 and will keep increasing until 2035 unless met by new projects and new discoveries. PERTAMINA EP Zone 7 needs a new gas source urgently.

There have been no exploitation activities in R field since discovery in 2019. After exploration activities were completed, the field was handed over to the Subsurface Development and Planning of PERTAMINA EP Zone 7 team in the middle of 2020, in order for the phase to continue into exploitation. As published by the Ministry of Energy and Resources of Indonesian Republic (Appendix 4), there are only two possible scenarios after exploration: develop the field or abandon and relinquish the field. The undeveloped potential in R field has become an issue that contradicts the business urgencies in the area.

Objective

This paper has two main objectives. First is to determine the root cause of the R field's stalled development. Second is to generate a decision analysis to determine the best alternative for a decision to be implemented in R field.

Research Methodology

This research follows the six-step model of problem solving that starts with problem definition and root cause determination. To solve the main issue of undeveloped potential in R field, the root cause of the issue must be found first. The methodology of the research begins with Strength-Weakness- Opportunity-Threat Analysis (SWOT Analysis) to give a picture of business situational analysis and Kepner-Tregoe Method to determine the root cause of the problem. It then continues with development

of alternatives and selecting the solution and finally completed with solution implementation and some take away points or lesson learnt from this research.

The research will progress with the Value Focused Thinking method to determine the desired goals. Based on those desired goals, a brainstorming session to seek out alternatives will be conducted. These alternatives from brainstorming will be validated using a reservoir dynamic simulation model to generate prediction and production forecast. Then a Simple Multi-Attribute Rating Technique (SMART Method) and economical calculation comparison based on PSC Model will be performed to select the best solution. The research methodology flow can be found in Appendix 5.

Results

SWOT Analysis is used to define the environment and the situation of the R field development project. The strengths, weaknesses, opportunities, and threats are input on the 2x2 matrix of SWOT analysis which describes the situational analysis of R field development project from both external and internal aspects, and factors that harmful and helpful for the project. These factors will be analyzed further to capture the root cause of the main issue of undeveloped potential in R field in the next section with Kepner- Tregoe (KT) Problem Analysis Method.

R Field Development Project SWOT

	Helpful	Harmful
Internal	<ul style="list-style-type: none"> R field is a "a brand new white canvas" Proven gas potential from the DST (drill stem test) Abundant and complete subsurface data 	<ul style="list-style-type: none"> Not a giant discovery High CO₂ content (impurities) Although surrounded by the producing fields, the location is remote No facility at all in the field
External	<ul style="list-style-type: none"> Surrounding gas field with existing facility and Gas Sales Agreement High gas demand in various range of gas rate demand Competent and experienced staff to produce the field 	<ul style="list-style-type: none"> Maximum gas price regulation by the government Existing field nearby to focused on (budget, effort, man power, rig) Asset port folio by the management team

Figure 1. R Field Development Project SWOT Analysis

KT Problem Analysis starting with the problem statement which for this project is "undeveloped potential in R field after exploration activities". The specific divergence in the R field is that the potential is not developed while the gas production is needed by PERTAMINA EP Zone 7, the demand is high, and the exploration activities must be followed with either an exploitation phase or abandonment.

The KT-Problem Analysis is then continued with the second step which describes the problem into 4 dimensions: What, Where, When, and Extent. "What" refers to the deviation that is happening in R field. "Where" refers to the position of the R field when the deviation occurred. "When" refers to the phase of the R field when the deviation occurred. While "Extent" discusses the extent of influence of the problem, in this case the gas production and the gas sales. Afterwards, the possible causes are listed for each described problem as shown below.

Table 1. Possible Causes in R Field Problem (Appendix 6)

SPECIFYING QUESTION	IS	IS NOT	DISTINCTION	CAUSE
WHAT What is the deviation?	Undeveloped potential after exploration activities.	Failed exploration with no oil and gas potential.	The amount of oil and gas in the reservoir	Reservoir characteristic.
WHERE Where is the problem occur?	Newly discovery of oil and gas prospect after exploration activity.	Existing fields that already developed	Business strategy from the management.	Management policy to develop or not develop the oil and gas potential due to the choice of strategy.
WHEN When is the problem occur?	before exploitation phase.	in the development phase.	Development strategy.	Development scenario to develop the potential opportunity is unknown.
EXTENT What is the extent effect?	No gas sales agreement can be constructed.	Field that has gas sales agreement.	The existence of gas sales agreement.	The existence of gas buyer nearby.

These possible causes are tested and classified as controllable or not controllable as explained in Appendix 6. The focus is on the 2 controllable causes: the external factor of the buyer availability, and the tools when the development scenario of R field is yet to be known. The first controllable cause is buyer availability. Although the R field is surrounded by other gas fields already produced and developed which also have

their own gas sales agreement, R field is a new discovery with as yet no gas buyer. This cause is controllable because gas customers are easy to find in this area. But without knowledge of the gas potential for sales delivery no gas sales agreement can be constructed.

The gas potential to be delivered depends on the development scenario for R field. This is the last controllable factor that should be resolved first, which in turn will facilitate the search for a gas buyer. These are the root causes of the undeveloped R field potential. To resolve, development scenario alternatives are determined, and their screening criteria selected. The Value Focused Thinking (VFT) screening criteria is used. The value in VFT is derived from the management KPIs related to the project (Appendix 7). The weight assigned to each KPI can be seen in the table below.

Table 2. Averaged Weight of KPI Objectives

KPI Objectives	Criteria	Weight (%)
Economic Profit	Projected Profit	5.33
Production Cost	Cost	4.00
Development Cost	Cost	4.33
Oil Production	Revenue	6.00
Gas Production	Revenue	6.00
POD Submission	Regulatory Compliance	4.00
FS/EID Approval	Regulatory Compliance	4.00

These are further grouped into 4 main criteria as shown in the table below.

Table 3. Selection Criteria

Criteria	Weight (%)	Normalized Weight (%)
Profit	5.33	15.84
Cost	8.33	24.75
Revenue	12.00	35.64
Regulatory Compliance	8.00	23.76
TOTAL	33.67	100.00

These 4 criteria are the ones used in the selection of the development scenario. However, regulatory compliance is not a quantitative criterion and more difficult to be measured and honored. Since this criterion is

important, the assigned weight for regulatory compliance of 8% is divided among the 3 others proportionally, each getting an additional 2.67%. The final focused criteria can be seen in the Table 4 below.

Table 4. Focused Criteria of Selection

Focused Criteria	Weight (%)	Normalized Weight (%)
Profit	8.00	23.76
Cost	11.00	32.67
Revenue	14.67	43.56
TOTAL	33.67	100%

To develop alternatives, Zone 7 internal brainstorming sessions and meetings with SKK Migas are held. These brainstorming meetings are held back and forth with both parties, involving a subsurface team, a surface facility team, representatives from finance, and supply chain, and an operation team. From the brainstorming 8 scenarios + 1 do-nothing scenario are determined as shown in Figure 2 below. The scenarios are then forecasted using a dynamic reservoir simulation. Appendix 8 is the result of the forecast of each scenario.



Figure 2. Final Development Scenarios for R Field

The Simple Multi Attribute Rating Technique (SMART) is used to select the best scenario from the alternatives. Based on the provisional decision benefit (the revenue derived from oil and gas forecast and multiplied by 50 USD/barrel or oil, 5.5 USD/mmscf gas for gas) and cost (Appendix 9) 4 alternatives (including 1 do-nothing) successfully dominate the selection. The benefit vs. cost plot can be seen in Figure 3 below. Profitability parameters of these 4 alternatives are

compared to choose the best alternative. The benefit vs. cost plot can be seen in Figure 3 below. Profitability parameters of these 4 alternatives are compared to choose the best alternative. The PSC model and constant variable used in the calculation can be seen in Appendix 10.

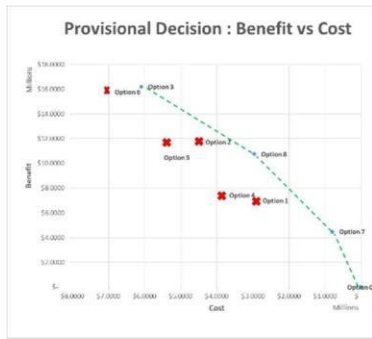


Figure 3. Provisional Decision Plot

Several key parameters are evaluated which indicate the profitability of the development scenarios: revenue, NPV, ROR, and contractor take. From the three best scenarios (the do-nothing scenario excluded) filtered by the SMART method, the profitability measurements are as follows (Appendix 11):

- In terms of revenue, scenario 3 results in the highest number with USD 44.5 Million.
- In terms of contractor take, which has the closest meaning to net profit, the highest number is generated by scenario 8. It shows that though scenario 3 gives the best revenue, it also needs the highest investment cost compared to others. Hence, the profit of scenario 3 is much lower than scenario 8.
- In terms of rate of return (ROR), scenario 7 gives the best ROR (14.90%) and passes the hurdle rate of PERTAMINA EP (11.33%). The other scenarios have a lower ROR than the hurdle rate. Therefore, in

terms of ROR, only scenario 7 fits the profitability parameter.

- Because 2 scenarios have ROR below the hurdle rate, their net present value (NPV) are negative. Only scenario 7 gives positive NPV which indicates that scenario 7 produces more profit than the other two scenarios.

Conclusions

1. The root cause of the undeveloped potential in R field after exploration activities were completed is the absence of a development scenario to exploit the R field potential. Without a development scenario, the viability of R Field is impacted by a lower rank in the portfolio development management of PERTAMINA EP Zone 7, no interested gas buyer, and unknown profitability.
2. Possible scenarios are filtered by the SMART method to find the optimum best scenario and compare profitability. Scenario 7, which is to develop only the oil layer in R field thru work over in well R-001 without any drilling activities, is the best alternative and gives positive returns for the company. The other scenarios are not recommended to be implemented in the R field because they will give less return for the company, even losses.

To execute scenario 7 in R field, a project execution team should be formed. The proposal of the team can be seen in Appendix 12. The execution will start in the last quarter of 2022 (October) and will produce the first oil on stream in July 2024. The estimated timeline of the project can be seen in Appendix 13.

Lessons Learned

1. All the potential resource layers must be considered and calculated in first discovery regardless of whether the discovery is classified as an oil field or gas field. This comprehensive approach will accelerate the development of newly discovered fields to gain faster additional production of oil or gas.
2. There should be better collaboration and work plan alignment between the exploitation team and exploration team to accelerate new discovery development. Hopefully better collaboration between the two functions will turn newly discovered field faster into additional production of oil or gas.
3. A comprehensive assessment of development projects in PERTAMINA EP including the economic evaluation should be considered to make sure that all the projects executed will give better profit to the company.

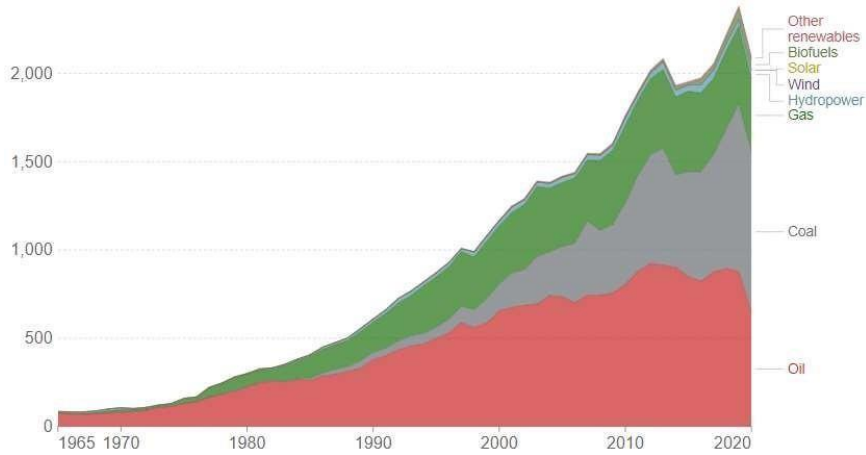
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Appendix 1 – Energy Trend and Energy Sources

Energy consumption by source, Indonesia

Primary energy consumption is measured in terawatt-hours (TWh). Here an inefficiency factor (the 'substitution' method) has been applied for fossil fuels, meaning the shares by each energy source give a better approximation of final energy consumption.



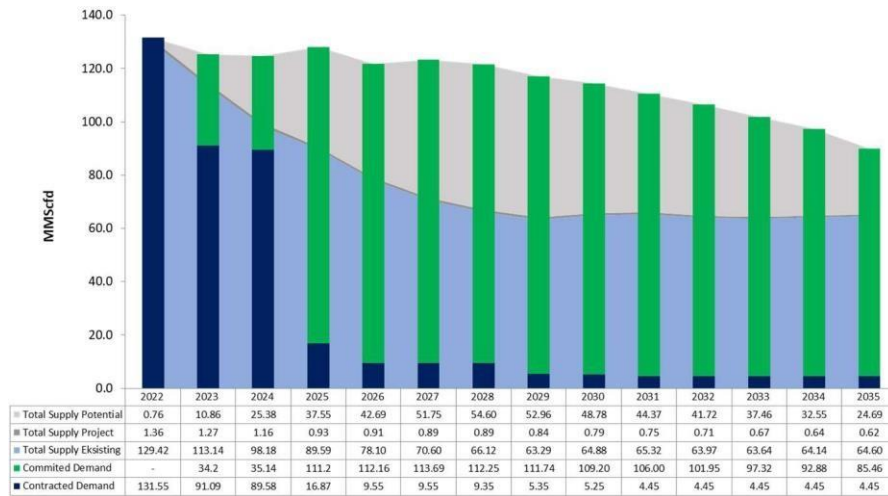
Source: BP Statistical Review of World Energy
 Note: 'Other renewables' includes geothermal, biomass and waste energy.

OurWorldInData.org/energy • CC BY

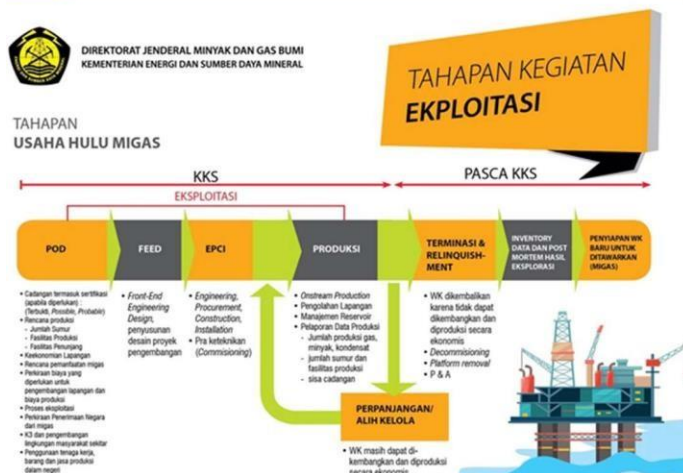
Appendix 2 – R Field



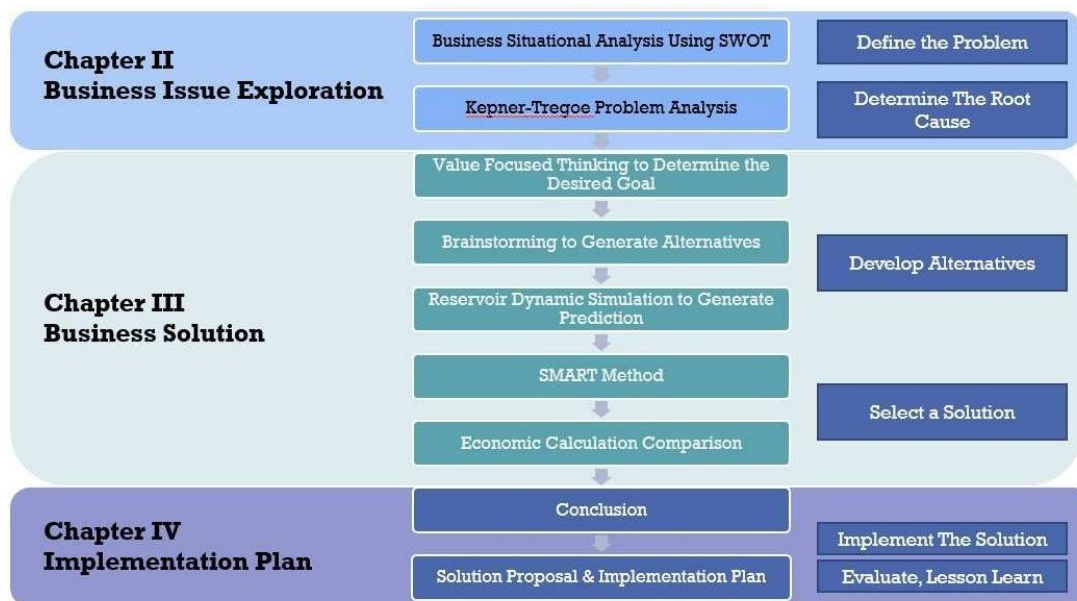
Appendix 3 – Gas Balance (Supply & Demand) in PERTAMINA EP Zone 7



Appendix 4 – Published Guidance from Ministry of Energy and Resources of Indonesia



Appendix 5 – Research Methodology



Appendix 6 – KT Problem Analysis Method

SPECIFYING QUESTION	IS	IS NOT	DISTINCTION	CAUSE
WHAT What is the deviation?	Undeveloped potential after exploration activities.	Failed exploration with no oil and gas potential.	The amount of oil and gas in the reservoir	Reservoir characteristic.
WHERE Where is the problem occur?	Newly discovery of oil and gas prospect after exploration activity.	Existing fields that already developed	Business strategy from the management.	Management policy to develop or not develop the oil and gas potential due to the choice of strategy.
WHEN When is the problem occur?	Before exploitation phase.	In the development phase.	Development strategy.	Development scenario to develop the potential optimally is unknown.
EXTENT What is the extent effect?	No gas sales agreement can be constructed.	Field that has gas sales agreement.	The existence of gas sales agreement.	The existence of gas buyer nearby.

POSSIBLE OF ROOT CAUSE	DISCUSSION	TESTING THE CAUSE	CONTROLLABLE / UNCONTROLLABLE
<u>External Factor</u>			
The existence of buyer nearby.	R field defined as the potential gas field with several gas layers. Therefore, to produce the gas which impossible to be stored, before the production the gas should has buyer (gas consumer) and gas sales agreement with the buyer. Since the field was a new discovery, it does not have gas sales agreement yet. So, it can not be produced yet.	This possible cause is true for specification dimension of Extent.	It is Controllable
<u>Material</u>			
Reservoir characteristic.	R field is not a giant discovery, which has the biggest oil or gas potential and triggered the development phase faster. This potential was given by the character of the underground reservoir and geological setting in the past by nature.	This possible cause is true for specification dimension of What.	It is not controllable
<u>Man</u>			
Management policy to develop or not develop the oil and gas potential due to the choice of strategy.	The uncertainty of this undeveloped new discovered field is higher than the developed and produced field. Thus, the management tend to be in the wait and see position until the uncertainty is reduced. With high CO2 content and limited gas price, R field development priority becomes lower in port folio.	This possible cause is true for specification dimension of Where.	It is not controllable
<u>Tools</u>			
<i>Development scenario to develop the potential optimally is unknown.</i>	<i>Before development phase, the most optimum development strategy is needed. This scenario created based on the subsurface, surface, and economical considerations. From several subsurface and surface scenarios, the scenario will be chosen based on the additional economic value.</i>	<i>This possible cause is true for specification dimension of When.</i>	<i>It is Controllable</i>

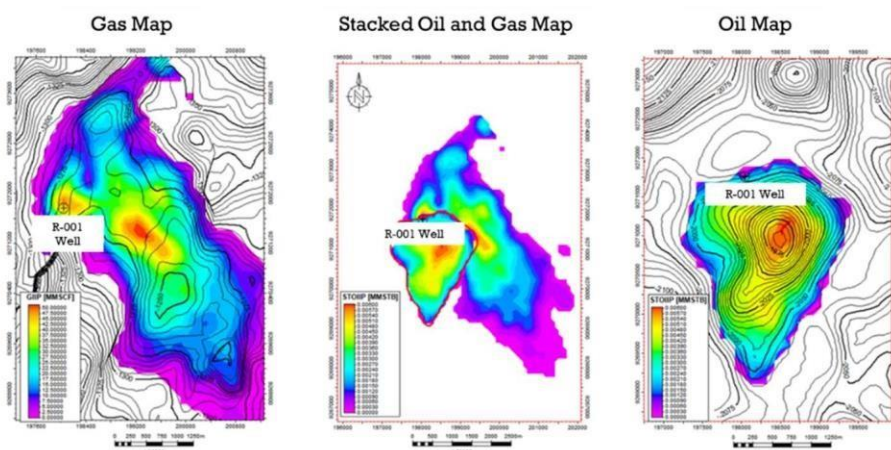
Appendix 7 – Management KPIs

No	NAMA KPI	UNIT	TARGET 2021	POLARITAS	BOBOT (%)		TARGET 2021TW IV
					Sub	Total	
A. Perspektif Finansial							2
1	EBITDA	USD Juta	374.90	Maximize	5	26	374.86
2	Economic Profit	%	31.94	Maximize	6		31.94
3	Cash Production Cost per Unit	USD/boe	12.93	Minimize	4		12.93
4	Development Cost per Unit	USD/boe	17.98	Minimize	4		17.98
5	Realisasi Penyerapan Investasi (ABI) Sumur Development & WO	%	85-100	Maximize	4		85-100
6	OPEX Optimization Fungsi Subsurface Development	%	90	Minimize	3		90
B. Perspektif Customer Focus							
1	Volume Produksi Minyak	MBOPD	7.35	Maximize	6	25	7.35
2	Volume Produksi Gas	MMSCFD	53.20	Maximize	6		53.20
3	Success Ratio Pemboran Pengembangan	%	80	Maximize	3		80,00
4	Submit POD/OPL/POP	Dokumen	1	Maximize	5		1
5	Persetujuan FS/FID	%	100	Maximize	5		100
C. Perspektif Internal Process							
1	Rata-Rata Penggunaan TKDN (consolidated)	%	30	Maximize	3	34	30
2	Total Recordable Incident Rate (TRIR)	Rate	0.54	Minimize	4		0.54
3	PROPER & HSSE SUPREME Assesment	%	100	Maximize	4		In-Progress
4	Tambahan Cadangan PI Migas	MMBOE	10.16	Maximize	5		10.16
5	Success Ratio Pengeboran Terhadap Target Produksi	%	75	Maximize	6		75
6	Success Ratio WO & WI	%	75	Maximize	6		75
7	PPP Bor, WO & Studi EPT	%	100	Maximize	3		100
8	Post Mortem Bor dan WO	%	100	Maximize	3		100
D. Perspektif Learning & Growth							
1	Realisasi Investasi (Progress Fisik)	%	90	Maximize	5	15	90
2	Program Strategic Initiatives	%	100	Maximize	4		100
3	Pengelolaan Kegiatan KSI & QMA	%	100	Maximize	3		100
4	Learning Hours	Jam/Pekerja	250	Maximize	3		250
Total KPI							100
E. Boundary KPI							
1	Number of Accident (NoA)	#	0	Minimize			
2	Pelaporan e-LHKPN	%	100	Maximize			
3	Improvement ESG Score	Delta Score	0	Maximize			
4	Pencapaian Sinergi Grup Pertamina	%	10	Maximize			
5	Risk Management Implementation	%	100	Maximize			
6	Tindak Lanjut Rekomendasi Hasil Audit Internal & External	%	100	Maximize			
7	Utilisasi Teknologi	%	100	Maximize			
8	OPEX Realization – Optimus Project	%	100	Maximize			
9	Utilisasi Sistem ERP	%	97	Maximize			
10	Pemenuhan SLA Expenditure Authority	%	100	Maximize			

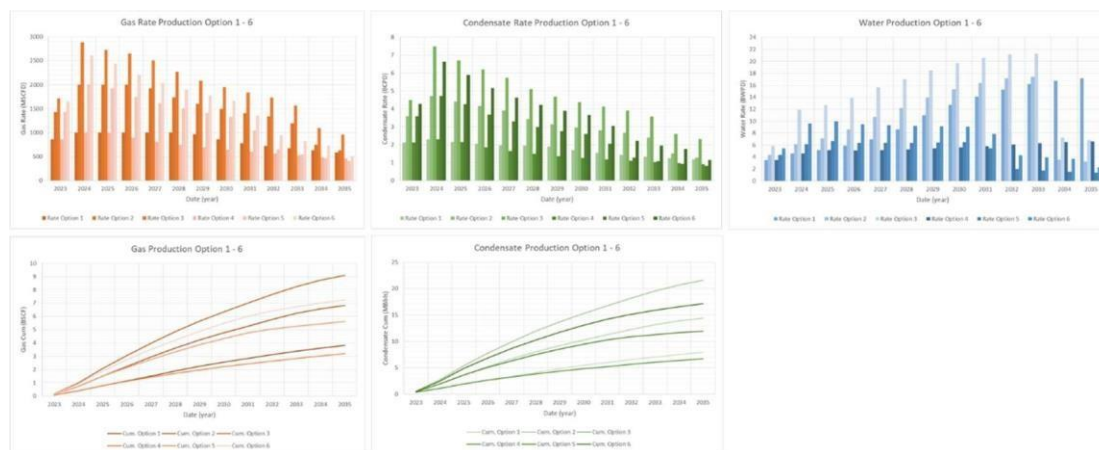
KPI Objective	Criteria	Relation to R Field Development
Economic Profit	Projected Profit	As explained in the conceptual framework, the profitability of a field is an important aspect which will impact the development priority as one of the KPI objective is to keep the company profitable .
Production Cost	Cost	To produce the oil and gas in development phase, there will be a need for operation cost.. By including the development of R Field, additional production will add cost which should be considered in meeting the KPI objective.
Development Cost	Cost	Like the production cost, the investment cost/capital cost is another objective in KPI to meet the company profitability goal. Additional investment to develop the R Field should consider this KPI objective too.
Oil Production	Revenue	As an upstream energy company, the only revenue will come from oil and gas production. Therefore, an
Gas Production	Revenue	

		opportunity to develop new potential like R Field will accelerate the achievement of this KPI objective.
POD Submission	Regulatory Compliance	As aforementioned, the company has a contract with the country thru SKKMigas. As previously explained in chapter one, to start the development phase a POD proposal should be submitted and approved first by SKKMigas. The R field will meet the objective of this KPI because the POD submittal will comply.
FS/FID Approval	Regulatory Compliance	In chapter one it is also already explained that PERTAMINA EP Zone 7 is one of the subsidiaries of Upstream Business of PERTAMINA (Persero). Therefore, any investment in a new project such as the new discovery R field needs approval from PERTAMINA in the form of FS (Feasibility Study) and FID (Final Investment Decision) before the development project can be started. One of the KPI objective for the team is FS/FID approval and the FS/FID approval for R field will accomplish this objective.

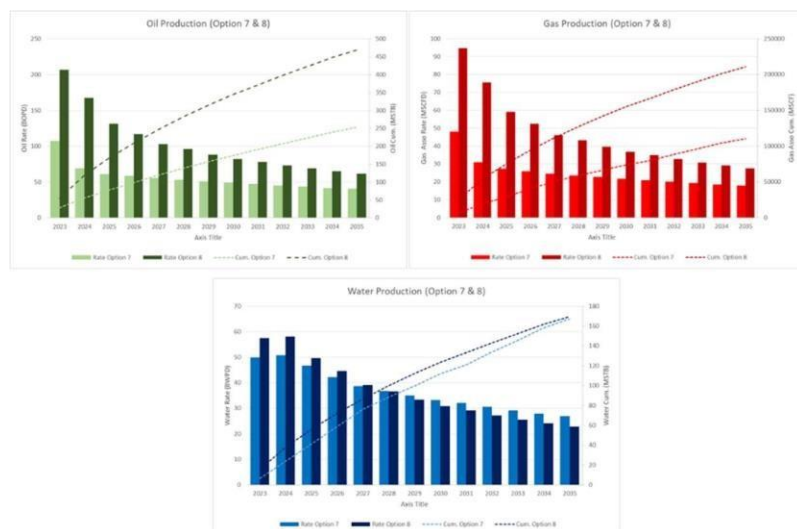
Appendix 8 – Dynamic Reservoir Simulation Oil and Gas Map



Gas Case Simulation Results



Oil Case Simulation Results



Appendix 9 – Project Cost Breakdown

Work Over Well Cost

No	Deskripsi	Days	Qty	U.P (USD)	Total (USD)
Tangible Cost					76,058.00
1	Tubing, 2-7/8 in, L-80, 6.5 ppf, EUE, R2		160	226.25	36,200.00
2	Packer, Mech, DG, 7", 26-29, 300F, 3.5 EUE		1	5,200.00	5,200.00
3	Pup Joint		3	337.31	1,011.93
4	X-over, Tbg, 2.7/8" EUE Box/Pin X 3.1/2" EUE Pin/Box		2	162.07	324.14
5	Seal Tubing Hanger 7-1/6" x 5,000 psi		1	1,137.93	1,137.93
6	X-mastree 3-1/8 X 2.1/16 Class BB 5,000 PSI		1	32,184.00	32,184.00
Intangible Cost					347,929.44
8	Sewa Rig Moving	9		7,106.00	63,954.00
9	Sewa Rig Operasi	14.55		8,360.00	121,638.00
10	Solar	23.55		1,085.96	25,574.33
11	Mud Services		700	44.00	30,800.00
12	TCP Perforasi		1	59,820.21	59,820.21
13	Fishing				
14	Cementing		2	18,499.15	36,998.30
15	G-Glass Cement		160	4.76	761.60
16	Service line & Communication		1	6,040.00	6,040.00
17	Personal (Company Man + HSSE)	23.55		100.00	2,355.00
Total					423,987.44

Gas Well Drilling Cost

LINE	DESCRIPTION	EXPRESSED IN U.S. DOLLARS		
		ORIGINAL BUDGET	REVISED BUDGET	
			1	2
TANGIBLE COST				
2	CASING	501,972.81		
3	CASING ACCESSORIES	121,174.00		
4	TUBING	33,361.50		
5	WELL EQUIPMENT - SURFACE	91,035.00		
6	WELL EQUIPMENT - SUBSURFACE	10,363.10		
7	OTHER TANGIBLE COST			
8	TOTAL TANGIBLE COST	757,906.41	-	-
INTANGIBLE COST				
10	PREPARATION AND TERMINATION			
11	- SURVEYS	13,698.63		
12	- LOCATION STAKING AND POSITIONING	-		
13	- WELLSITE AND ACCESS ROAD PREPARATION	2,228,961.64		
14	- SERVICE LINES & COMMUNICATIONS	9,058.22		
15	- WATER SYSTEMS	154,734.52		
16	- RIGGING UP / RIGGING DOWN	161,543.66		
17	Subtotal	2,567,656.68	-	-
18	DRILLING / WORKOVER / WELL SERVICE OPERATIONS			
19	- CONTRACT RIG	679,937.57		
20	- DRILLING RIG CREW / CONTRACT RIG CREW	-		
21	- MUD, CHEMICAL & ENGINEERING SERVICES	623,574.01		
22	- WATER	-		
23	- BITS, REAMER AND CORE HEADS	73,518.00		
24	- EQUIPMENT RENT	249,815.15		
25	- DIRECTIONAL DRILLING AND SURVEYS	219,289.00		
26	- DIVING SERVICES	-		
27	- CASING INSTALLATION	141,715.07		
28	- CEMENT, CEMENTING AND PUMP FEES	322,087.71		
29	Subtotal	2,309,936.52	-	-
30	FORMATION EVALUATION			
31	- CORING	-		
32	- MUD LOGGING SERVICES	55,076.71		
33	- DRILL STEM TEST	-		
34	- OPEN HOLE ELECTRICAL LOGGING SERVICES	114,601.48		
35	Subtotal	169,678.19	-	-
36	COMPLETION			
37	- CASING LINER AND TUBING INSTALLATION	54,373.75		
38	- CEMENT, CEMENTING AND PUMP FEES	66,237.27		
39	- Cased Hole Electrical Logging Services	48,179.86		
40	- PERFORATING AND WIRELINE SERVICES	26,812.60		
41	- STIMULATION TREATMENT	-		
42	- PRODUCTION TEST	15,750.00		
43	Subtotal	211,353.48	-	-
44	GENERAL			
45	- PROJECT MANAGEMENT TEAM	113,642.50		
46	- INSURANCE	1,870.40		
47	- PERMITS AND FEES	91,114.38		
48	- MARINE RENTAL AND CHARTERS	-		
49	- HELICOPTER AVIATION AND CHARGES	-		
50	- LAND TRANSPORTATION	-		
51	- OTHER TRANSPORTATION	-		
52	- FUEL AND LUBRICANTS	357,571.96		
53	- CAMP FACILITIES	5,068.49		
54	- ALLOCATED OVERHEAD - FIELD OFFICE	21,286.29		
55	- JAKARTA OFFICE	21,286.29		
56	Subtotal	611,840.32	-	-
57	TOTAL INTANGIBLE COST	5,870,465.19	-	-
58	TOTAL COSTS	6,628,371.60	-	-
59	TIME PHASED EXPENDITURES:			
60	- 2018	6,628,371.60		
61	- 2019			
62	- 2020			
63	TOTAL	6,628,371.60	-	-

Gas Surface Facility Investment Cost

No	Items	Unit Cost (US\$)	Lokasi	Unit	Option 1 Quantity Kapasitas	Total Cost	Option 2 Quantity Kapasitas	Total Cost
A FLOWLINE								
1	Flowline WO RWG-001	\$ 191	Cluster RWG	m	300 3 INCH SCH-80	\$ 57,276.00	300 3 INCH SCH-80	\$ 57,276.00
2	Flowline ING-1	\$ 191	Cluster RWG	m		\$ -	300 3 INCH SCH-80	\$ 57,276.00
3	Flowline ING-2	\$ 191	Cluster RWG	m		\$ -		\$ -
4	Flowline INO-1	\$ 96	Well to SP BDA	m		\$ -		\$ -
5	Gathering Line Gas	\$ 128	Well to SP BDA	m	7,700 4 INCH SCH-80	\$ 985,600.00	7,700 4 INCH SCH-80	\$ 985,600.00
6	Test Line Gas	\$ 96	Well to SP BDA	m	7,700 3 INCH SCH-80	\$ 739,200.00	7,700 3 INCH SCH-80	\$ 739,200.00
B UPGRADING SP BDA								
1	LP Prod Separator	\$ 220,888	SP BDA	Unit	1 500 BLPD & 1 MMSCFD	\$ 220,888.20	1 500 BLPD & 3 MMSCF	\$ 220,888.20
2	HP Test Separator	\$ 264,678	SP BDA	Unit		\$ -		\$ -
3	LP Test Separator	\$ 162,579	SP BDA	Unit	1 300 BLPD & 1 MMSCFD	\$ 162,578.56	1 300 BLPD & 3 MMSCF	\$ 162,578.56
4	LP Scrubber	\$ 70,893	SP BDA	Unit	1 1 MMSCFD	\$ 70,893.18	1 3 MMSCFD	\$ 70,893.18
5	HP Scrubber	\$ 137,049	SP BDA	Unit	1 3 MMSCFD	\$ 137,049.42	1 3 MMSCFD	\$ 137,049.42
6	CO ₂ Removal	\$ 2,733,150	SP BDA	Unit	1 3 MMSCFD	\$ 2,733,150.00	1 3 MMSCFD	\$ 2,733,150.00
7	LP Gas Compressor	\$ 2,761,961	SP BDA	Unit		\$ -		\$ -
8	Mini Gas Compressor	\$ 948,150	SP BDA	Unit	2 0.35 MMSCFD	\$ 1,896,300.00	2 0.35 MMSCFD	\$ 1,896,300.00
9	Piping System	\$ 1,000,000	SP BDA	Lot	1 Refer to Forecast	\$ 1,000,000.00	1 Refer to Forecast	\$ 1,000,000.00
10	Civil Job	\$ 1,000,000	SP BDA	Lot	1 Refer to Equipment	\$ 1,000,000.00	1 Refer to Equipment	\$ 1,000,000.00
11	Power System	\$ 501,666	SP BDA	Lot	1 +/- 200 kVA	\$ 501,665.51	1 +/- 200 kVA	\$ 501,665.51
C Land Acquisition								
1	ROW Flowline INO-1	\$ 38	Well to SP BDA	m ²		\$ -		\$ -
2	ROW Gathering Line Gas	\$ 38	Well to SP BDA	m ²	30,800 Lebar ROW 4 meter	\$ 1,184,507.04	30,800 Lebar ROW 4 meter	\$ 1,184,507.04
3	ROW Test Line Gas	\$ 38	Well to SP BDA	m ²	30,800 Lebar ROW 4 meter	\$ 1,184,507.04	30,800 Lebar ROW 4 meter	\$ 1,184,507.04

No	Items	Unit Cost (US\$)	Lokasi	Unit	Option 3		Total Cost	Option 4		
					Quantity	Kapasitas		Quantity	Kapasitas	
A	FLOWLINE									
1	Flowline WO RWG-001	\$ 191	Cluster RWG	m	300	3 INCH SCH-80	\$ 57,276.00	300	3 INCH SCH-80	\$ 57,276.00
2	Flowline ING-1	\$ 191	Cluster RWG	m	300	3 INCH SCH-80	\$ 57,276.00			\$ -
3	Flowline ING-2	\$ 191	Cluster RWG	m	300	3 INCH SCH-80	\$ 57,276.00			\$ -
4	Flowline INO-1	\$ 96	Well to SP BD	m			\$ -			\$ -
5	Gathering Line Gas	\$ 128	Well to SP BDA	m	7,700	4 INCH SCH-80	\$ 985,600.00	7,700	4 INCH SCH-80	\$ 985,600.00
6	Test Line Gas	\$ 96	Well to SP BDA	m	7,700	3 INCH SCH-80	\$ 739,200.00	7,700	3 INCH SCH-80	\$ 739,200.00
B	UPGRADING SP BDA									
1	LP Prod Separator	\$ 220,888	SP BDA	Unit	1	500 BLPD & 3 MMSCF	\$ 220,888.20	1	500 BLPD & 1 MMSCFD	\$ 220,888.20
2	HP Test Separator	\$ 264,678	SP BDA	Unit	1	200 BLPD & 1.2 MMSCFD	\$ 264,677.64	1	200 BLPD & 1.2 MMSCFD	\$ 264,677.64
3	LP Test Separator	\$ 162,579	SP BDA	Unit	1	300 BLPD & 3 MMSCF	\$ 162,578.56	1	300 BLPD & 1 MMSCFD	\$ 162,578.56
4	LP Scrubber	\$ 70,893	SP BDA	Unit	1	3 MMSCFD	\$ 70,893.18	1	1 MMSCFD	\$ 70,893.18
5	HP Scrubber	\$ 137,049	SP BDA	Unit	1	3 MMSCFD	\$ 137,049.42	1	3 MMSCFD	\$ 137,049.42
6	CO2 Removal	\$ 2,733,150	SP BDA	Unit	1	3 MMSCFD	\$ 2,733,150.00	1	3 MMSCFD	\$ 2,733,150.00
7	LP Gas Compressor	\$ 2,761,961	SP BDA	Unit	1	3 MMSCFD	\$ -	2	3 MMSCFD	\$ 5,523,922.58
8	Mini Gas Compressor	\$ 948,150	SP BDA	Unit	2	0.35 MMSCFD	\$ 1,896,300.00			\$ -
9	Piping System	\$ 1,000,000	SP BDA	Lot	1	Refer to Forecast	\$ 1,000,000.00	1	Refer to Forecast	\$ 1,000,000.00
10	Civil Job	\$ 1,000,000	SP BDA	Lot	1	Refer to Equipment	\$ 1,000,000.00	1	Refer to Equipment	\$ 1,000,000.00
11	Power System	\$ 501,666	SP BDA	Lot	1	+/- 200 kVA	\$ 501,665.51	1	+/- 200 kVA	\$ 501,665.51
C	Land Acquisition									
1	ROW Flowline INO-1	\$ 38	Well to SP BD	m2			\$ -			\$ -
2	ROW Gathering Line Gas	\$ 38	Well to SP BDA	m2	30,800	Lebar ROW 4 meter	\$ 1,184,507.04	30,800	Lebar ROW 4 meter	\$ 1,184,507.04
3	ROW Test Line Gas	\$ 38	Well to SP BDA	m2	30,800	Lebar ROW 4 meter	\$ 1,184,507.04	30,800	Lebar ROW 4 meter	\$ 1,184,507.04

No	Items	Unit Cost (US\$)	Lokasi	Unit	Option 5		Total Cost	Option 6		
					Quantity	Kapasitas		Quantity	Kapasitas	
A	FLOWLINE									
1	Flowline WO RWG-001	\$ 191	Cluster RWG	m	300	3 INCH SCH-80	\$ 57,276.00	300	3 INCH SCH-80	\$ 57,276.00
2	Flowline ING-1	\$ 191	Cluster RWG	m	300	3 INCH SCH-80	\$ 57,276.00	300	3 INCH SCH-80	\$ 57,276.00
3	Flowline ING-2	\$ 191	Cluster RWG	m			\$ -	300	3 INCH SCH-80	\$ 57,276.00
4	Flowline INO-1	\$ 96	Well to SP BD	m			\$ -			\$ -
5	Gathering Line Gas	\$ 128	Well to SP BDA	m	7,700	4 INCH SCH-80	\$ 985,600.00	7,700	4 INCH SCH-80	\$ 985,600.00
6	Test Line Gas	\$ 96	Well to SP BDA	m	7,700	3 INCH SCH-80	\$ 739,200.00	7,700	3 INCH SCH-80	\$ 739,200.00
B	UPGRADING SP BDA									
1	LP Prod Separator	\$ 220,888	SP BDA	Unit	1	500 BLPD & 3 MMSCFD	\$ 220,888.20	1	500 BLPD & 3 MMSCFD	\$ 220,888.20
2	HP Test Separator	\$ 264,678	SP BDA	Unit	1	200 BLPD & 1.2 MMSCFD	\$ 264,677.64	1	200 BLPD & 1.2 MMSCFD	\$ 264,677.64
3	LP Test Separator	\$ 162,579	SP BDA	Unit	1	300 BLPD & 3 MMSCFD	\$ 162,578.56	1	300 BLPD & 3 MMSCFD	\$ 162,578.56
4	LP Scrubber	\$ 70,893	SP BDA	Unit	1	3 MMSCFD	\$ 70,893.18	1	3 MMSCFD	\$ 70,893.18
5	HP Scrubber	\$ 137,049	SP BDA	Unit	1	3 MMSCFD	\$ 137,049.42	1	3 MMSCFD	\$ 137,049.42
6	CO2 Removal	\$ 2,733,150	SP BDA	Unit	1	3 MMSCFD	\$ 2,733,150.00	1	3 MMSCFD	\$ 2,733,150.00
7	LP Gas Compressor	\$ 2,761,961	SP BDA	Unit	2	3 MMSCFD	\$ 5,523,922.58	2	3 MMSCFD	\$ 5,523,922.58
8	Mini Gas Compressor	\$ 948,150	SP BDA	Unit	-	-	\$ -	-	-	\$ -
9	Piping System	\$ 1,000,000	SP BDA	Lot	1	Refer to Forecast	\$ 1,000,000.00	1	Refer to Forecast	\$ 1,000,000.00
10	Civil Job	\$ 1,000,000	SP BDA	Lot	1	Refer to Equipment	\$ 1,000,000.00	1	Refer to Equipment	\$ 1,000,000.00
11	Power System	\$ 501,666	SP BDA	Lot	1	+/- 200 kVA	\$ 501,665.51	1	+/- 200 kVA	\$ 501,665.51
C	Land Acquisition									
1	ROW Flowline INO-1	\$ 38	Well to SP BD	m2			\$ -			\$ -
2	ROW Gathering Line Gas	\$ 38	Well to SP BDA	m2	30,800	Lebar ROW 4 meter	\$ 1,184,507.04	30,800	Lebar ROW 4 meter	\$ 1,184,507.04
3	ROW Test Line Gas	\$ 38	Well to SP BDA	m2	30,800	Lebar ROW 4 meter	\$ 1,184,507.04	30,800	Lebar ROW 4 meter	\$ 1,184,507.04

Oil Surface Facility Investment Cost

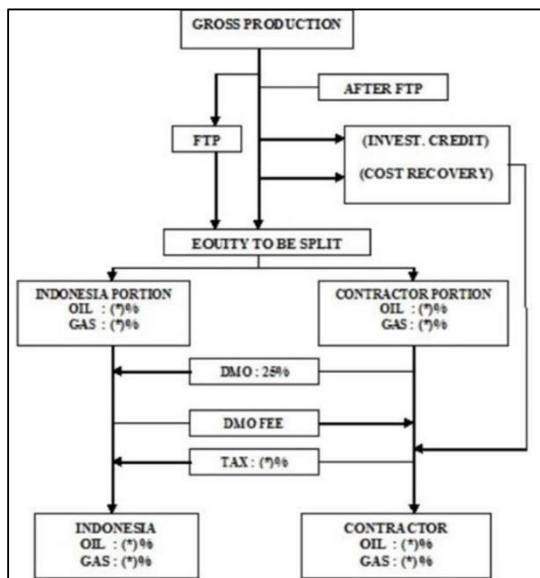
No	Items	Unit Cost (US\$)	Unit	Option 7		Total Cost	Option 8		
				Quantity	Kapasitas		Quantity	Kapasitas	
A	FLOWLINE								
1	Flowline WO RWG-001	\$ 191	m	300	3 INCH SCH-80	\$ 57,276.00	8,000	3 INCH SCH-80	\$ 1,527,360.00
2	Flowline ING-1	\$ 191	m			\$ -			\$ -
3	Flowline ING-2	\$ 191	m			\$ -			\$ -
4	Flowline INO-1	\$ 96	m			\$ -	8,000	3 INCH SCH-80	\$ 768,000.00
5	Gathering Line Gas	\$ 128	m			\$ -			\$ -
6	Test Line Gas	\$ 96	m			\$ -			\$ -
B	UPGRADING SP BDA								
1	LP Prod Separator	\$ 220,888	Unit	1	500 BLPD & 1 MMSCF	\$ 220,888.20	1	500 BLPD & 1 MMSCF	\$ 220,888.20
2	HP Test Separator	\$ 264,678	Unit	1	200 BLPD & 1.2 MMSCF	\$ -			\$ -
3	LP Test Separator	\$ 162,579	Unit	1	300 BLPD & 1 MMSCF	\$ 162,578.56	1	300 BLPD & 1 MMSCF	\$ 162,578.56
4	LP Scrubber	\$ 70,893	Unit	1	3 MMSCFD	\$ -			\$ -
5	HP Scrubber	\$ 137,049	Unit	1	3 MMSCFD	\$ -			\$ -
6	CO2 Removal	\$ 2,733,150	Unit	1	3 MMSCFD	\$ -			\$ -
7	LP Gas Compressor	\$ 2,761,961	Unit	1	3 MMSCFD	\$ -			\$ -
8	Mini Gas Compressor	\$ 948,150	Unit	1	3 MMSCFD	\$ -			\$ -
9	Piping System	\$ 1,000,000	Lot	1	Refer to Forecast	\$ 1,000,000.00	1	Refer to Forecast	\$ 1,000,000.00
10	Civil Job	\$ 1,000,000	Lot	1	Refer to Equipment	\$ 1,000,000.00	1	Refer to Equipment	\$ 1,000,000.00
11	Power System	\$ 501,666	Lot	1	+/- 200 kVA	\$ 501,665.51	1	+/- 200 kVA	\$ 501,665.51
C	Land Acquisition								
1	ROW Flowline INO-1	\$ 38	m2			\$ -	30,800	Lebar ROW 4 meter	\$ 1,184,507.04
2	ROW Gathering Line Gas	\$ 38	m2			\$ -			\$ -
3	ROW Test Line Gas	\$ 38	m2			\$ -			\$ -

From the costs breakdown above, there are several highlighted information:

- ✓ 1 work over well activity cost is \$423,987.44 per well per job.
- ✓ 1 gas well drilling cost is \$6,628,371.60 per well.
- ✓ 1 oil well drilling cost is \$7,154,109.04 per well. The cost of oil well drilling is higher than gaswell due to the higher depth of the oil zone which will take longer time and more tubulars.
- ✓ Each scenario has different cost of surface facility investment.

Appendix 10 – Constant Variable for Economic Calculation in PSC Model

Parameters	Number	Remark
First Tranche Petroleum (FTP)	5%	First oil or gas tax for the government before the production split as per contract.
Crude Price	50 USD/bbl per day	This number will be used from 2022 to 2035, flat. This number is based on the internal direction in 2022 and will be used for all of project in PERTAMINA EP.
Gas Price	6 USD/mmscfd	This number is based on the maximum gas price as set by the government and based on the West Java Access gas price, the biggest buyer in the area.
Operating Cost Oil	25.39 USD/bbl per day	The cost to produce one barrel of oil. Defined for each field in each year to be used in all operation cost calculation in onefield. This number is published by internal document called “Annual C5” document.
Operating Cost Gas	2 USD/mmscfd	The cost to produce one million standard cubic foot of gas. Defined for each field in each year to be used in all operationcost calculation in one field. This number is published by internal document called “Annual C5” document.
Contractor Share	67.277%	Share of oil and gas production after the FTP for the PERTAMINA EP.
Government Share	32.773%	Share of oil and gas production after the FTP for the government.
Tax	40.5%	Tax for the contractor share that will be paid to the government.
Hurdle Rate	11.33%	The minimum IRR that is expected from a project to be executed must be bigger than this number.



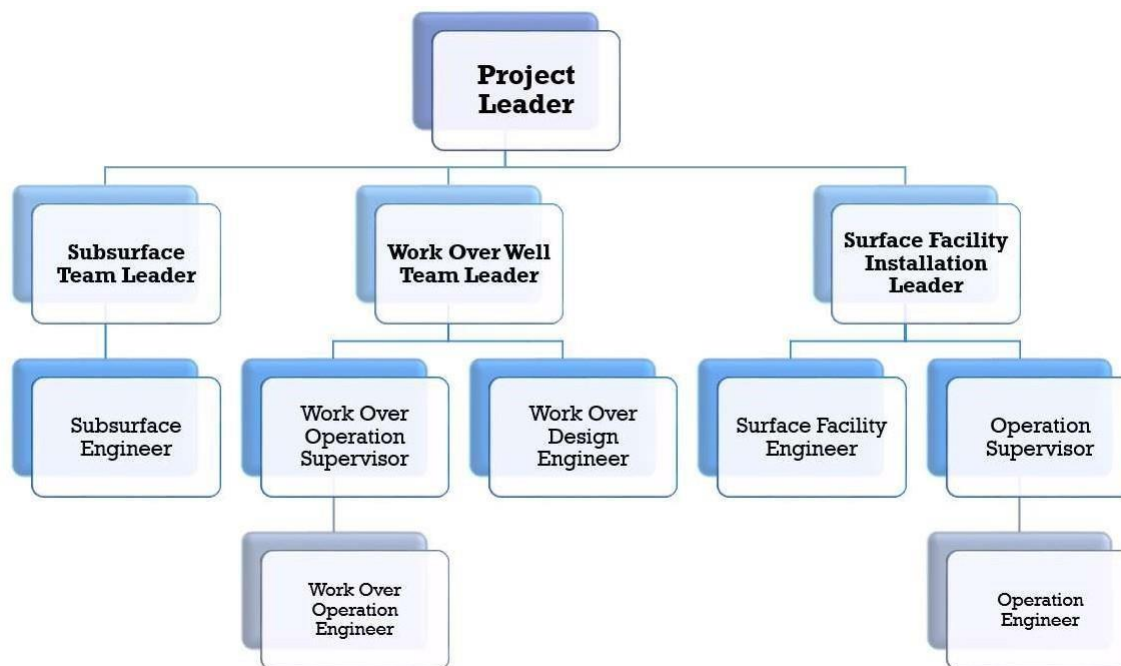
Appendix 11 – Profitability Comparison

No	Parameters	Units	Scenario 3	Scenario 7	Scenario 8
1	Oil Production	MBO	17.12	254.00	468.94
2	Oil Price	US\$/bbl	50.00	50.00	50.00
3	Gas Production	MMscf	7,249.62	0.40	0.92
4	Gas Price	US\$/Msc	6.00	6.00	6.00
5	Gross Revenue (100%)	M US\$	44,524.97	15,924.38	29,627.31
6	Investments				
	Capital	M US\$	11,078.37	1,986.88	3,274.95
	Non Capital	M	14,590.53	2,849.59	9,198.06
7	US\$Operating Cost				
	Operating	M US\$	14,841.66	5,077.15	9,380.71
8	Cost Recovery	M	40,354.86	9,913.03	21,852.73
	US\$(% Gross Revenue) %		90.63%	62.25%	73.76%
9	Government Take				
	Undiscounted	M	2,502.06	3,606.81	4,664.75
	US\$(% Gross Revenue) %		5.62%	22.65%	15.74%
10	Contractor :				
	Contractor Take	M	1,668.04	2,404.54	3,109.83
	US\$(% Gross Revenue) %		3.75%	15.10%	10.50%
	NPV	M	(7,823.19)	343.34	(1,001.00)
	ROR	%	1.20%	14.90%	7.47%
	POT	Years	4.00	4.00	4.00
	PIR	\$/ \$	0.70	1.07	0.92

Appendix 12 – Project Team Member & Organization

Project Role	Current Position	Current Organization
Project Leader	Senior Geologist	Subsurface Development Area 2 Team
Subsurface Team Leader	Reservoir Engineer	Subsurface Development Area 2 Team
Subsurface Engineer	Geologist	Subsurface Development Area 2 Team
Subsurface Engineer	Production Engineer	Subsurface Development Area 2 Team
Work Over Well Team Leader	Senior Well Intervention Engineer	Well Intervention Team
Work Over Design Engineer	Well Intervention Engineer	Well Intervention Team
Work Over Operation Supervisor	Work Over & Well Service Assistant Manager	J Field Team
Work Over Operation Engineer	Work Over & Well Service Engineer	J Field Team
Work Over Operation Support	Petroleum Engineer	J Field Team

Surface Facility Installation Leader	Surface Facility Engineer	Project Team
Surface Facility Engineer	Surface Facility Engineer	Project Team
Surface Facility Engineer	Surface Facility Jr. Engineer	Project Team
Operation Supervisor	Production & Operation Assistant Manager	J Field Team
Operation Engineer	Production & Operation Senior Supervisor	J Field Team



Appendix 13 – Estimated Project Timeline

Group	Activity	2022				2023				2024														
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Proposal	Final Proposal Making																							
	Pre-FEED Study																							
	FEED (Front End Engineering Design) Study																							
Approval	Zone 7 Approval (from Top Management)																							
	Regional 2/PEP Head Office Approval																							
	Pertamina Upstream Challenge Session																							
	Pertamina Upstream Approval																							
Execution	SKK Migas Approval																							
	Flow line land survey																							
	Flow line procurement & installation																							
	Work Over Equipment Procurement																							
	Separator Procurement																							
	Separator Installation																							
	Upgrading Facility in BGD																							
	Land Clearing in R-001 area																							
R-001 Area Repairing & Construction																								
Work Over Well R-001																								
On Stream																								
	Well On Production																							

DO RELIGIOUS AFFILIATIONS AFFECT PEOPLE'S DETERMINATION TO CONTRIBUTE TO SOCIAL FINANCE APPLICATIONS? A STUDY OF INTERPRETIVE PARADIGMS

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Abstract: This study examined the effect of religion on the determination to contribute to Social Finance application. A survey of 100 Muslims was administered. The results revealed discrepancies between respondents' determination to contribute to social finance. On average, many Muslims put their zakat through several platforms. However, there is a quite hesitancy where most Muslims used social finance application based on famousness of the platforms. In contrast, the majority of Muslims have no objections to contribute money in religiously related enterprises. Interpretive paradigms were utilized to examine religiosity, and four sets of instruments were employed: descriptive questions, an ethnographic analytic interview, structural questions, and contrast questions. The result indicated that religious affiliation has a substantial impact on the determination to social finance where most respondent will be considering the famousness of the application, familiarity, easiness and trust in putting their contribution in term of zakat or charity to the platforms. The result also reveals that most of respondent are familiar with technology where it also become the future implication of the next study to considering more wider respondent in term of age and profession to grasp more wider perspective and opinion.

Keywords: Religiosity, Social Finance, Contribution Decision, Interpretive Paradigms

Introduction

The Islamic finance industry in Indonesia has continued to expand despite a number of current strategic obstacles and restraints. Several strategic challenges, such as a lack of business model diversification, inadequate human resources in terms of quality and quantity, and low levels of literacy and inclusion, hamper the expansion of Islamic finance in Indonesia (Hasan & Daud, 2014; Kumar et al., 2006; Liao et al., 2011).

In addition, as a result of the COVID-19 epidemic, global conditions have compelled humanity into a "New Normal" era and necessitated societal separation, which has transformed social and economic behavior. On the other hand, concern for aiding one another has grown, especially in financial difficulties. This can be seen as both a challenge and an opportunity for the Islamic banking industry to provide digital-based services and meet societal demands by contributing to economic development after a pandemic.

Continual development of Islamic finance that takes into account a variety of strategic issues, opportunities, and constraints (Buchory, 2014; Ergin et al., 2019; Malini & Jais, 2014b; Wadhwa, 2016).

Many policies, including national-level foreign policies, are compatible with the path of Islamic finance development. On the other hand, concern for aiding one another has grown, especially in financial difficulties. These obstacles might be considered as both a challenge and an opportunity for the Islamic banking industry to provide digital-based services and meet societal demands by contributing to economic development in the wake of a pandemic (De Wit, 2019; Li, 2016; Malini & Jais, 2014a).

Typically, Islamic finance falls into two categories: Islamic social finance and Islamic commercial finance. Funds from zakat, infaq, sadaqah (ZIS), and waqf can be used to generate Islamic social finance. Islamic commercial finance, on the other hand, is derived from sharia banking products such as sharia financing or sharia investment products such as Sukuk. According to data from the National Amil Zakat Agency (BAZNAS) and the Financial

Services Authority (OJK), these two Islamic finance industries have grown annually for the previous two decades (Mali, 2020; Malini, 2021b; Proctor & Rumbley, 2018).

According to (De Wit, 2017; Knight, 2008), Religion has the biggest influence on a person's values, habits, and attitudes, with religious believers incorporating the creed and teachings of their faith into every aspect of their lives, including the choosing of profitable and moral investment portfolios. In the Islamic paradigm, Maslaha (benefit and blessing) takes precedence over utility. A Muslim society that decides to invest in a Maslaha-based product is the result of religiously motivated investments (Khan & Haleem, 2016; Malini, 2020c; Marsh & Bugusu, 2007).

In Islam, investing and contribution in term of faith are linked. The role of faith in becoming a standard of measurement because it provides principles and norms that influence human personality in terms of conduct, lifestyle, taste, attitude, and resources. Islam encourages a balanced approach to the world and the hereafter. Do not overindulge in this world or the afterlife. In verse 77 of the letter Al-Qashash, Allah swt. stated: "Seek (pleasure) in what Allah has bestowed upon you in the hereafter, but do not neglect your portion of (joy) in this world. Do good (to others) as Allah has done good to you, and do not cause harm on earth. Indeed, Allah dislikes people who commit evil." This passage states that the hereafter has been provided as a destination for the dead, but that mankind was originally designed to remain in this earth. Thus, as preparations must be made for the afterlife, the world must also serve as a location to prepare for life in the afterlife (Aggarwal, 2011; Malini, 2020b; Park et al., 2022).

The distinctiveness of the Indonesian religion market necessitates this analysis for the reasons stated above. Religion is a significant determinant of behavior in Indonesia, which has a substantial impact on investment outcomes. In Indonesia, religion wields immense economic influence and shapes economic consideration. This study aims to determine the scope and contribution of religion on investor investing decisions. In particular. The purpose of this study is to determine whether religious individuals will consider their religious code, norm, standard, and credo when making investment decisions (Chan & Mansori, 2016; LIM, 2017; Malini, 2019; Malini & Maghribi, 2021). The United States pioneered donation-based crowdfunding, which was then emulated in England, Italy, Spain, Germany, Australia, Canada, and lastly Indonesia, with the appearance of the websites Jadikan.com, joint venture.net, and kitabisa.co.id. Donation-based crowdfunding combines with the legacy of mutual collaboration

Table 1. Donation Crowd fund platform in Indonesia

No	Platform	Established
1.	Amartha	April 2010
2.	Kita Bisa.com	2013
3.	Ayo peduli.id	2013
4.	Akseleran	2017
5.	Gandeng Tangan	2015
6.	Kolase.com	2018

Literature Review

Most forms of Islamic finance can be broken down into two broad categories: Islamic commercial finance (ICF) and Islamic social finance (ISF) (IICSF). Although ISF has been operating in a relatively benign manner, the resurgence of Islamic finance in the present day is essentially the resurgence of ICF. (Verlegh, 2007) notes that in Indonesia, an IMFI known as Baitul Maal wat Tamwil (BMT) has implemented IICSF. BMT is a cooperative recognized as an Islamic financial institution that combines ISF and ICF in its Baitul Maal and Baitut Tamwil branches. When pitted against more traditional MFIs, BMT has a long list of disadvantages to overcome (Malini et al., 2022).

Because cash waqf is included in their liabilities, the IICSF helps not only those who receive zakat, those who donate to charities, and those who receive waqf benefits at the end of the process (mawquf 'alayh), but also those

who come in the middle, especially the BMTs who have more financial stability. Consequently, these BMTs would be able to provide their members with reduced funding and be less vulnerable to economic shocks. The Indonesian Islamic Bank Act No. 21 of 2008 allows Islamic banks to manage Islamic social funds (including zakat, infaq, sadaqah, and other Islamic social funds) through the establishment of Baitul Maal, which means that Islamic rural banks in Indonesia could implement this IICSF at the community level (Malini, 2020a; Nica, 2013; Oberecker et al., 2008; Putra et al., 2016).

The Latin word "religare," meaning "to tie," is the root of the English word "religion." The Arabic word Taqwa, which is derived from the word Tadayyun, meaning "to be prudent and to obey," and Tadayyun is the Arabic word for "wara'un." For a long time, people couldn't agree on a single interpretation of religious texts. To be sure, we can all agree that religious beliefs are a major factor in shaping the actions that people take. In addition to traditional statistical and scientific indicators, a (Erhieyovwe & Onovwoakpoma, 2013; Malini, Seinna, et al., n.d.; Rachmawati & Agus, 2020; Tambunan, 2005).

(Elias & Malini, n.d.; Kumar, 2005; Scharnagl & Stapf, 2015; Xie & Zhang, 2013) draws the conclusion that religion has an impact on economic ethics because of the ways in which believers modify their behavior to accommodate their religious beliefs. Whereas a research from (Ghosh, 2019; Malini, 2021a) looks at how religion affects the economy as a whole by analyzing how it leads to higher income and faster economic growth, (De Pelsmacker et al., 2001; Malini et al., 2021) results imply that a person's faith toward religion will influence that person's allegiance toward an Islamic product, where it leads to increased freedom of choice, which in turn explains the increase in income and growth of income due to religiosity. According to (Helma Malini, 2021; Phillips, 2014) research, religious influences can be seen in the development of financial regulations, standards, and instruments that may cause consumers' perceptions of certain products to shift. According to the results of several research, there is only a small correlation between religious beliefs and people's choices about money. Investor decisions were found to have a small association with other investors' actions, according to research by (Ouda, 2021). Members of religious groups participated in the study. Nonetheless, (Syahputra et al., 2020) found that a person's level of confidence in others and the quality of their interpersonal connections have an impact on their level of financial commitment. Even if opinions are rarely sought after, (Malini, Islahiyah, et al., n.d.) shows that there is a tendency for religious believers to provide mutual support, which helps to a sense of belonging and mutual confidence. According to Benjamin, the strongest sense of community is seen in Christianity and Judaism due to the presence of pre-activities that follow religious services (Malini, 2022).

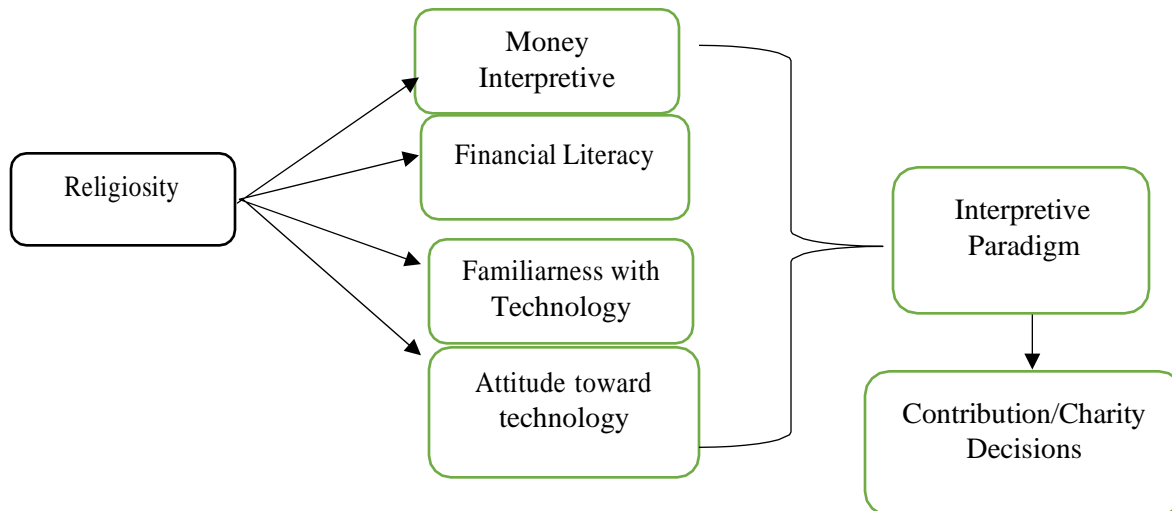
Christianity has the greatest influence due to its emphasis on professional employment, whereas Hinduism has the least influence because to its emphasis on obtaining harmony and reducing wealth attachment, as shown in a study from (Filippin et al., 2013) using the Prisoner's Dilemma game. Certainly, one's religious beliefs affect one's outlook on life. However, more study is needed, especially in light of Indonesia's characteristics and peculiarities, to determine whether or not religion contributes to and influences a person's decision.

There are two factors that influence a person's religiosity: internal factors linked with one's own psychological development and maturation, and external factors such as one's family, community, and religious upbringing. According to the Islamic viewpoint, there are three components of religious observance: *aqidah* (belief and faith), *sharia* (religious norms including worship and *muamalah*), and ethics (thought and character).

In the practice of the teachings of Islam, five aspects of religiosity are recognized. a) Features of Faith This pertains to man's beliefs and relationships with God, Angels, Prophets, etc. b) Islamic traits, particularly with respect to the regularity and intensity of devotional rituals such as prayer, zakat, fasting, and hajj. c) *Ihsan*, particularly feelings and experiences of God's presence, fear of prohibition, etc. d) Aspects of Science that relevant to an individual's understanding of his religion's teachings. For example, understanding of *fiqh*, monotheism, etc. e) Aspect of charity linked to proper social conduct. For instance, providing aid to others and defending the helpless.

The five components of variety are as follows: a) Belief and relationship with God and the unseen as taught by religion; b) Race; c) Gender; and d) Sexual orientation. b) Islam, specifically the frequency and intensity of worship practice. c) *Ihsan*, which means to experience, feel, and value somebody. d) Science, namely understanding about a person's religion. e) Generosity, or social behavior in general

Figure 1. **Conceptual Framework**



Methodology

This study describes and analyzes its data using a qualitative case study research approach. In-depth interviews were used to evaluate how well responders handled the questions. Participant observation, one-on-one interviews, and focus groups all contributed to the descriptive statistical analysis of the data. The importance of each approach used in the study's data collection was also discussed in detail. 100 Muslims from the Indonesian provinces of West Kalimantan took part in the research, all of whom matched the following inclusion criteria: (Must be between 25 and 55 years old, have at least three years of professional experience, make at least three million Rupiah each month and having one among social finance application.

Data Analysis Method

Interpretive Paradigms and Ethnographic Methods

The interpretive paradigm is used because this paradigm views reality as something that is subjective, created, discovered and interpreted. This paradigm understands the nature of humans as creators of their world, and creators of meaning, so that knowledge built with this paradigm is common sense, inductive, ideographic that emphasizes meaning and is not free of values. The purpose of the interpretive paradigm is to interpret and to understand social phenomena, so that it is relevant to be used in this study aimed at interpreting the contribution of religion affiliation toward investment decisions in Indonesia.

To reach this goal, researchers used the ethnographic method as a research method. According to (Hashimzade et al., 2013), ethnography is a qualitative design in which a researcher describes and interprets the patterns of values, behavior, beliefs and language that are learned and adhered to by a cultural group. Ethnography is also known as part of the history of science that studies society, ethnic groups and other ethnic formations, ethnogenesis, composition, displacement of residence, social welfare characteristics, as well as their material and spiritual culture. Ethnography is often applied to collect empirical data about society and human culture. Data collection is usually done through participant observation, interviews and questionnaires. These scientific aims to explain the state of the society being studied (for example to explain someone, an ethnos) through writing.

Associated with the nature of reality, interpretive paradigms perceive reality is plural and holistic. Researchers interact directly with the subject in the field in a mutually binding relationship (value bound), the research process takes place in a cycle (not linear), aims to develop theories, and the final results or findings are open ended,

meaning that the research findings are still open to criticism, revision, even to blame (being falsified).

Table 2. Focus on Ethnographic Research

No	Steps of Ethnographic Interview
1.	Determining Respondent
2.	Having an Interview with respondent
3.	Making Ethnographic note
4.	Delivering Descriptive Questions
5.	Delivering Ethnographic analytic Interview
6.	Making domain analysis
7.	Delivering structural questions
8.	Making Taxonomic Analysis
9.	Delivering contrast questions
10.	Making component analysis
11.	Finding culture themes
12.	Ethnographic writing

Source : Spradley (1997 : 181)

Table 3. Description on Ethnographic Question

Descriptive Questions	Ethnographic Questions	Structural questions	Contrast questions
Questions given to the events, situations and actions that they are involved with; and of the accounts they give of their lives and experiences;	Questions given to understand the particular context within which the participants act, and the influence this context has on their actions;	Questions given to Identified unanticipated phenomena and influences, and generating new, grounded theories about them;	Questions given to avoid bias in assuming and delivering a contrast situation with a reality question that previously give to respondent

Source : Spradley (1997 : 181)

Item of questions	Descriptive Question
Money Interpretive	1. What are your thoughts on money? As instruments for achieving objectives? Or as instruments to optimize wealth 2. In your experience, does money bring more harm or benefit to your life? 3. What proportion of your assets are monetary in nature?
	Ethnographic Questions
Faith in a higher power	1. You firmly think that God will give you with a stable existence if you work diligently. 2. You are optimistic about the future and what it holds for you. 3. Are you in agreement that taking risks is a part of your financial struggle or sacrifice?
	Structural Questions
Familiarness with Technology	1. Have you ever struggled with smartphone operation?

	2.Do you believe that donating through a platform is one of the finest ways to give your philanthropy to a deserving institution or individual?
Attitude toward Technology	<p>Contrast questions</p> <p>What method do you choose to donate? directly or through intermediaries?</p> <p>According to you, is platform-based giving much simpler and more convenient?</p>

Result and Discussion

Table 4. Respondent Profile

Item	Percentage	
Gender	Male	63,64%
	Female	36,36%
Age	30 and below	2,10%
	31-35	8,39%
	36-40	30,07%
	41-45	34,97%
	46-50	16,78%
	51 and above	7,69%
Education	Junior High School	14,69%
	Senior High School	53,85%
	Diploma	7,69%
	First Degree	13,99%
	Masters	14,69%
	Phd	9,09%
Income	Less than or equal to Rp. 3.000.000	12.3
	Between Rp. 3.000.000 untilRp. 5.000.000	22.3
	Between Rp. 5.000.000 until Rp. 7.000.000	53.2
	Between Rp. 7.000.000-Rp. 9.000.000,-	10.7
	Between Rp. 9.000.000-Rp 11.000.000	0.7

Table 1 shows that 63.64 percent of respondents are male and 36.36 percent are female. As far as their age is concerned, at least 2.10 percent are under 30 years old. Then, the most disparate ranged between 41 and 45, comprising 34.97 percent. In terms of education, 53.85% of the population had at least a high school diploma, while 7.69% had a bachelor's degree or above. The income range with the highest percentage is between 5,000,000 and 7,000,000 Rp (53.2%), while the range with the lowest percentage is between 9,000,000 and 11,000,000 Rp (9.2%).

In terms of gender, the aforementioned distribution of respondent data indicates that men make the majority of financial decisions. However, this does not provide a comprehensive picture of how women's contributions to social finance applications might be utilized for decision making. In the meantime, the age range is between 41 and 45 years, with the majority of respondents demonstrating financial maturity at this age, allowing them to make their own financial decisions, including whether to invest in social finance applications. The highest distribution of education is among high school graduates, indicating that respondents who are able to contribute to social finance have gained a reasonable amount of understanding and information after completing high school. In contrast, the majority of respondents have incomes between 5 and 7 million rupiah, which corresponds to the income range in which respondents can make and set aside contributions to social finance applications.

Religious Affiliation toward money interpretive

The purpose of publicizing one's religious activities is to inspire more people to develop a personal practice of creative devotion (worship) to Allah alone. In fact, the above-mentioned religiosity factor and the ability to comprehend can be used to characterize religiosity. Beliefs as a cognitive aspect, feelings as an effective element, and actions as a psychomotor factor all have continuity with one another. Therefore, religiosity is a multifaceted amalgamation of an individual's religious knowledge, religious emotions, and religious behavior.

Numerous dimensions of human existence are manifestations of religious belief and practice. Diversity of activity occurs not only when someone engages in ritual conduct (worship), but also when they engage in other activities that are motivated by an internal impulse. not just limited to what can be seen with the naked eye but also including the inner workings of a person's mind and spirit.

Money can increase one's ego in addition to satisfying basic, secondary, tertiary, social, and spiritual needs. Money enhances self-respect, self-confidence, and the willingness to express opinions, speak in public, and assume societal obligations.

1. What are your thoughts on money? As instruments for achieving objectives? Or as instruments to optimize wealth

The respondents' responses to the coding revealed that they viewed money as a tool for achieving goals, not as a means to maximize wealth. This is significant as an introductory issue because humans believe that money is the ultimate objective, not a means to maximize wealth. Respondents who believe that money is a tool for maximizing wealth are hesitant to invest their funds or make contributions to social finance applications because they perceive social finance applications to be a waste of money. Those who answered that money is a tool to attain goals, on the other hand, tend to realize that their life goals must be achieved using money, so that money is viewed as significant but not the most important factor. Respondents with this knowledge will readily invest or contribute to social finance initiatives.

2. In your experience, does money bring more harm or benefit to your life?

The second question seeks to determine whether money has a greater negative or positive impact on the respondent's life. This question was answered by the respondent by demonstrating, following labeling, that more money brings benefits. With this response, it may be deduced that if more money provides the responder greater benefits, then the respondent will say that more money is beneficial for both survival and charity. If the charity orientation has been satisfied, the respondent will assume that investing in social finance or donating to social finance will improve the respondent's life.

3. What proportion of your assets are monetary in nature?

The next question is designed to determine how much of the respondent's assets are stored in cash. If the respondent indicated that the majority of his assets were in the form of money, then he had a tendency to convert assets into money and preferred assets in the form of money. Money is also a highly liquid asset, therefore transferring it to other forms of assets and platforms is straightforward. If the respondent decides to donate to the social finance platform, it will be extremely simple for them to do so. Alternatively, if the respondent mentioned that he likes to transfer his funds in the form of other assets, such as gold, automobiles, land, and property, then he will have difficulty allocating his funds on platforms that require particular commitments, such as social finance application platforms.

In response to this question, respondents indicated that monetary assets are their preference.

Faith in a higher power

1. You firmly think that God will give you with a stable existence if you work diligently.

This question focuses on whether the answer believes the power above is sufficient and will offer sufficient fortune for all humans if they try. If this concept is believed, the respondent will likewise believe that behind their money is the fortune of others, allowing them to lay aside a portion of their fortune for others without hesitation. The confidence that God will provide for one's needs if he or she works hard is bolstered by a sequence of deep-faith actions that result in the transformation of trust into tranquil strength.

Some responders replied that they felt Allah SWT would give them with sufficient fortune if they worked and tried diligently. This response was provided by the majority of respondents so that they could contribute to social finance platforms in Indonesia with confidence.

2. You are optimistic about the future and what it holds for you.

The future is the time period that will occur after the present. If a person has confidence in his religion and God, he is confident in his future and will continue to engage in hopeful activities in the present. A negative attitude toward life is not taught by Islam. Sadness, suicide, and praying or longing to die soon are prohibited by Islam.

Optimism (optimistic attitude) is a form of self-assurance and one of Islam's highly recommended attitudes. A person with a positive view will be passionate about both life in this world and life after death. Possessing an optimistic perspective is a must for all humans, particularly Muslims. Since a Muslim is optimistic, he will always endeavor to achieve his objectives with total sincerity for Allah.

The second segment of the interpretive interview focused on the relationship between money and the respondent's faith. In conclusion, the question is comprised of and based on the respondent's emotions when getting money, with 80% of respondents expressing optimism for the future and its contents. Twenty percent of the remaining respondents responded that they do not relate their financial decisions with their religious affiliation. According to the perceptions of the respondents, there are no differences between the conventional portfolio and the Shariah portfolio, forcing them to select the conventional investment product in the final questions.

According to Hassan (2009), religion has assumed a leading role in affecting the financial attitudes of individuals. A faith-based economic system in which money has worth because we all agree it does is known as a faith-based economic system. Almost eighty percent of respondents stated that money was only a tool and that financial products should be able to reflect the intricacies of their religious affiliation.

3. Are you in agreement that taking risks is a part of your financial struggle or sacrifice?

In his interview transcript, one of the respondents stated, "I am a risk-averse individual." I try to avoid taking any risks with my investments. In contrast, another respondent states, "I am terrified of losing my money since I am the primary provider for my family, and according to our religion, it is a man's duty to provide for his family."

Religion teaches that "we cannot survive without another person in our lives," which can be interpreted as one individual becoming the caregiver for the entire family while another is a communal leader. The question focuses on the respondent's ability to deal with risk, such as losing money in investments, and addresses the human character (Arrunada, 2010).

However, every religion also teaches confidence and faith in God. Islam provides comprehensive guidance on how to manage all forms of hazards, including investment and commercial risks. Chapra (2008) defines risk in Shari'ah as "promotion of the well-being of the people, which entails protecting their faith (din), their ego (nafs), their intellect (aql), their lineage (nasl), and their money. The acceptable risk of investment stresses the significance of overcoming and effectively managing risk. However, there are specific risk characteristics that investors must consider when dealing with investment risk. The parameters would be; dangers can be mitigated, but cannot be removed entirely. Total avoidance of essential risk is banned since it constitutes a transfer of risk to the other contracting party.

The mentioned question in the ethnographic interview attempts to determine whether the respondent is familiar with the associated risk and describes the parameters. 70% of respondents indicated a strong connection with their religion, especially with regard to the sense of security that a strong faith provides. This sense of security and stability is the outcome of a journey of obedience that, in the context of faith, results in a strong assurance that what is lost will be replaced with something superior and provided for in the near future.

Respondents also stated that the likelihood of investing in a portfolio based on religious principles, such as Bank Shariah, would be minimal. The reason for this is that Bank Shariah produced a banking product that was adjusted in accordance with Shariah principles, one of which is Maqsid al-Shariah, which states that no party should incur excessive losses owing to particular circumstances (Damodaran, 2007).

On the final portion of the interview, which consists of contrast questions, 70% of respondents state unequivocally that they would pick a religiously affiliated investment in the financial markets. This declaration also acknowledged those with diverse religious beliefs who have no qualms about selecting an investment portfolio based on a different religion.

Familiarness with Technology

1. Have you ever struggled with smartphone operation?

Respondents' perspectives on technology varied widely. When compared to respondents of a similar age range, those 65 and higher were generally less productive, less likely to think that online options were superior to in-person activities (whether at work, school, socializing, or shopping), and likely more frustrated by new technologies. Those who couldn't afford or have access to fast internet were less likely to get things done, shop online, or avoid getting frustrated by advances in technology. It was discovered that frequent use of certain technologies, such social media and video games, significantly reduced productivity, whereas frequent use of email had the reverse effect. In conclusion, having more experience with various forms of virtual technology was associated with less overall frustration.

While the pandemic may be seen by some as an opportunity to increase the usage of cutting-edge technology, it is essential to keep in mind that not everyone has the same level of familiarity with or access to such resources. Our survey data shows a clear divide in response rates, suggesting that people who aren't as tech savvy, don't have access to fast internet, or are just older are less likely to embrace online alternatives even if they may be their only choice in the future. It will be important to keep these contrasts in mind as the use of video software for business and education, online commerce, and virtual ways of human interaction grows in popularity.

2. Do you believe that donating through a platform is one of the finest ways to give your philanthropy to a deserving institution or individual?

Donations made in a digital format, especially through the internet, are distinct from traditional ways of giving. Such generosity facilitates interaction between individuals who would otherwise have to physically meet to exchange information.

Despite this, many people are still hesitant to make digital donations due to a lack of familiarity with digital donations and the infrastructures that support them. They also had doubts about how openly the collected funds were being used.

Actually, there is now openly available online information about what digital donations are and the platforms that make them possible, as well as transparency information about the amount of donations and the distribution of the donations themselves. Based on their individual values and skillsets, donors can choose from a wide range of online contribution platforms with a wide range of missions.

Donors should carefully examine their options before deciding on a digital donation platform. When trust in the platform that is used to collect and disperse aid money must be ensured,

1. What method do you choose to donate? directly or through intermediaries?

In choosing how to donate, 72 respondents chose to donate their money through the donation application platform that they downloaded both on the Appstore and on IOS. The donation application, which is currently widely available, was chosen for the reason that it provides convenience and is given a monthly donation report by the application. This donation report lets donors know and understand where their donations are being made and distributed so that donors finally trust and will continue to use the application to make donations.

Meanwhile the remaining 28 respondents chose to donate their money through intermediaries or intermediaries either through conventional people or institutions. This conventional institution has a physical place available in the area closest to the respondent. The reason the respondents chose a conventional place as their donation channel was because the respondents felt there was a physical form where they could see the place of their donation so that this physical attachment that occurred created trust.

2. According to you, is platform-based giving you simplicity and much more convenient?

Eighty percent of respondents indicated that platform-based donations are more convenient and comfortable. Donations made online utilize digital currency. With the introduction of electronic currency, individuals will be able to contribute to charity causes without spending cash. Electronic currency expedites and simplifies transactions. With this digital donation platform, it is now easy for anyone, from anywhere, at any time, to send money. The introduction of non-cash payment technology is expected to make it easier, safer, and more transparent to collect community donations.

Meanwhile, 20 respondents claimed that donating through application platforms was inconvenient because they did not understand technology. As a result, they were hesitant to download and use these applications, preferring to pay directly to conventional institutions.

Discussion

Charity is an activity carried out by every religious community to show their obedience to the creator. This study aims to find out whether Muslims are affected religiously when they are going to make donations through an application platform that can be downloaded via Android or IOS. The study was conducted in the form of a qualitative study by conducting interviews with 100 respondents through questions prepared through an

interpretive paradigm consisting of descriptive questions, ethnographic questions, structural questions and contrasting questions.

From descriptive questions that focus on finding the respondent's interpretation of money. Money is a tool to achieve goals and put hopes. For most respondent's money is the ultimate goal to accumulate wealth. Meanwhile, for other respondents' money is a tool to achieve various kinds of life goals. For example, if their goal is to perform Umrah, they will collect the money and then achieve the Umrah goal and return to making other goals that will be achieved with money.

The respondent's interpretation of money is so important because money revolves around the respondent's daily life. Not only as a tool to achieve goals but also to put hope. The hope for a better future is also the hope that the economy will be fine. The second question is an ethnographic question aimed at knowing the closeness of the respondents to their creator. Our closeness to the creator of us is a feeling of faith that cannot be described in words. However, the structure of the questions is made by directing the respondent's thoughts to the belief that God will provide, optimistic about the future and believing that to get something, the respondent must sacrifice.

For this question most of the respondents stated that on the basis of their faith. They believe that God will provide so they are optimistic that the future will be better for them. They also believe that the sacrifices they make both in the form of risk are a form of sacrifice that must be made to get greater benefits in the future.

Meanwhile, structural questions were prepared to find out whether the respondent's level of familiarity with technology. The level of familiarity of respondents with technology is important to know because they are going to make donations through an application that is downloaded via their cellphone, so the respondents should already be familiar with technology. Most of the respondents answered that they were familiar with the technology used, including the applications they downloaded to donate. Meanwhile, some respondents believe that even if they donate through the application, their donations will be properly channeled and conveyed to those in need.

Next is the contrast question where this question is structured to find out whether the respondent has a very deep connection with his or her beliefs. Questions are directed to find out whether in every decision making, the respondent will always refer back to beliefs. This is because Islam has given basic rules when carrying out activities in daily life, including when carrying out donation activities. Respondents because they have basic beliefs that are obedient and strong, when they are going to carry out their daily activities, be it in the form of donations, they will always refer to their respective religions and beliefs, namely in this case Islam.

Conclusions

Some societies define themselves culturally through their religious beliefs, hence it is important for religious constructivism to give adherents with a moral compass. Human actions then shape the cultural norms and religious expectations of the time. Those who follow a religion are guided in their choices by the moral principles of that faith. Christians, Buddhists, and Hindus make up the religious minorities of Indonesia. Researchers used interpretive paradigms and ethnographic methods to uncover respondents' religiously-informed worldviews. They discovered, for example, that Muslim investors are affiliated with Islam, follow Islamic religious principles, and shun investments related to alcohol, pornography, and gambling. They are avoiding an interest fee-based system as part of the expansion to the implementation, which explains why Indonesia has two separate banking systems. Christians who invest tend to hold views that span from liberalism to conservatism, but regardless of their ideology, they all share the conviction that hard labor will ultimately reward them monetarily (conservatism) (liberalism). Even though religiously affiliated investments have grown in popularity in Indonesia, the investors still prioritize trustworthiness and adaptability, as evidenced by the results of the ethnographic interview. Both Muslims and non-Muslims in Indonesia are finding it challenging to understand the nuances of Shariah-compliant investment due to the fact that the majority of relevant terms are written in Arabic and are not user-friendly.

These findings indicate that religious convictions play a role in investment choice so long as they are guided by and consistent with ethical norms and standards. Respondent recognizes that conventional investing and religious

moral and creed cannot be kept separate in Indonesia's financial systems, but argues that the two should be allowed to mix in the implementation.

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