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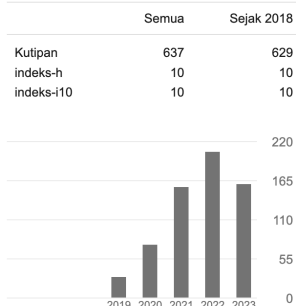
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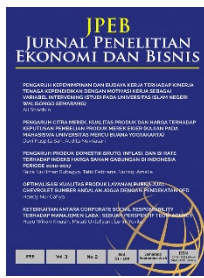
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Stimbut: Initiation of a Sustainable Business Strategy Model in Improving MSME Capability to Meet Consumer Expectations

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Abstract

A sustainable business strategy is inevitable for 21st-century businesses. Consumers expect MSMEs to adopt sustainable strategies but realizing one's needs is the only impetus for any consumer. Thus, there is a gap between business sustainability practices and consumer expectations. This research identifies strategic sustainable business strategies to be integrated into business practices. This type of research uses exploratory qualitative methods. The type of data is primary data which is a direct answer from the informant. The data collection technique uses an interview method. The sampling design used non-probability sampling (snowball). The analysis technique is through data collection, data reduction, data presentation, and concluding because it can explain, assess, and visualize superior MSME empowerment modeling. The results of this study indicate that four strategies can be applied by MSMEs, including New vs. returning visitors, Bounce rate, Abandonment rate, and cost per conversion. The results of this study can contribute to the development of a technology-based sustainable business strategy which is expected to become the primary role model in increasing the competitiveness of MSMEs.

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INTRODUCTION

The Covid-19 pandemic is accelerating an unprecedented economic downturn, and small businesses are likely to bear its brunt. Mandatory restrictions and social distancing forced many small businesses to shut down, costing millions of people their jobs and driving down sales. According to Thaha (2020), various business actors face different problems with a certain loss level, such as decreased demand, supply chain disruptions, cancellation of export orders, shortage of raw materials, and transportation disruptions. The dramatic and sudden loss of demand and income for MSMEs has dramatically affected their business performance. In addition, from the consumer side, they experience loss of income, fear of contagion, and increased uncertainty, which ultimately reduces spending and consumption. MSME actors tend to be more vulnerable to policy restrictions on activities in the community because their conventional-based business performance is hampered due to their lack of ability to adapt to apply technological sophistication. MSME actors have to face many challenges such as logistical disruptions, restrictions on labor mobility, and a decline in market order. Because of dwindling demand, MSME players have been struck (Central Bureau of Statistics & Cooperatives and SMEs Service, 2020). Changes in regional external trade and tourism activity indicate an average growth rate of 5.0% from 2022 nationally. In other words, the economic growth rate in 2023 is predicted to continue to increase more consistently. The most significant economic growth is expected to occur in DKI Jakarta, Bali, Java and Kalimantan, where it is estimated that their GRDP (Gross Regional Domestic Product) will increase to 7.5% or on a growth basis in 2022 of 5.9% on. Meanwhile, the weakest impact will occur in the provinces of Papua and Sumatra, where the economy will only increase by 1.2%, from 15.72% in 2021 to 16.92% in 2022. The main contributors to the increase in company performance are almost uniform in various regions in Indonesia, especially in terms of population mobility to work after the Covid-19 pandemic. Meanwhile, the fiscal stimulus allocation is IDR 405 trillion (+/-2.5% of GDP) in the form of social assistance (IDR 110 trillion), the health budget (IDR 75 trillion), industrial incentives (IDR 70 trillion), and economic recovery (Rp.150 trillion) which impacts increasing growth by 15% in public consumption behaviour.

Decision-makers in each company face various situations and trends in multiple sectors, such as the social environment, digital technology, and internet-based creative markets (Ashar'ari & Daud, 2017). The external sector impacts decision-makers doubts about determining an alternative strategy that is accurate and sustainable because it requires high costs compared to the speed of benefits obtained. However, this understanding needs a better perspective. It is far from the ideal conditions that have been designed regarding the implementation of sustainable business strategies to increase competitiveness and the ability to meet market expectations. The contribution of the latest business strategies based on sustainability and social benefits significantly supports company competitiveness in the industry because intelligent markets expect to be increasingly involved in company business processes (Assauri, 2016). Following the "green"-based business philosophy, currently, the term sustainable business strategy is the main focus of every company to invest in increasing the company's competitiveness in the industry both in terms of profit, concern for the environment, and comprehensively meeting customer expectations so that the company's existence is difficult to beat by its competitors even though Not all companies can do this, but the initiation and investment of these business strategies will have a more significant impact on the company's value and brand in the eyes of customers (Dirisu, Iyiola, & Ibidunni, 2013). This sustainable business strategy investment aims to meet customer expectations, so companies must increase production capacity, product quality, competitive prices, massive promotions, and digital-based HR competencies.

Phenomena found in the field through the interview process and according to the results of previous research show the results that many business people are not able to explore products to market optimally because they need a forum to express creative ideas so that they are integrated and sustainable so that there is a supervisory function for change and developments in the business world globally and can be evaluated in facing more fierce competition in the future. The following phenomenon is the decline in people's purchasing power due to the situation and economic conditions of the people who are under pressure and changing consumption patterns which usually means that people who have more products for the long term switch to choosing gain experience, besides that formal sector employment is shrinking which causes many to change professions to the informal sector so that it has an impact on their income, as well as the transition to online business

which causes massive layoffs (Choudri et al., 2016). This raises demands for companies to prioritize tighter competitive advantage in the industry. The business strategy that can be applied in this study was developed from a generic business strategy which includes Cost Leadership Strategy, Differentiation Strategy, Focus Strategy, and Leadership/Differentiation integrated to make it more applicable and comprehensive.

A comparison of research results shown in previous studies shows the conclusion that consumer buying decision behaviour is very dependent on the perceived value and usefulness of the product. This research aims to initiate a sustainable business strategy model based on business value as the ultimate goal to provide multiplier effects for companies such as innovation, collaboration, communication and long-term commitment. The outcome of implementing the sustainable business strategy model also focuses on the product's ability to meet customer expectations without high promotional costs comprehensively. In addition, the sustainable business strategy model is also able to encourage the potential for company competitiveness in the industry to be higher and facilitate companies to influence consumer shopping behaviour, so the urgency of this research is to provide input on the potential for sustainable business strategies by targeting consumer expectations through value creation as a basis. (Dangelico & Vocalelli, 2017). Formulating a company's growth strategy is essential in making decisions to harmonize the external environmental conditions around the company with the resources and capabilities owned, which are core competencies, as well as the expectations and goals the company wants to achieve. In a situation of market competition environment In this accessible and dynamic environment, management is required to create sustainable value for the company that can provide satisfactory contributions to all stakeholders, customers, employees, investors, suppliers, distributors and competitors. This sustainable value is essential, especially when Indonesia's macroeconomic conditions cannot be separated from the volatility that occurs, such as the weakening of the rupiah, a slowdown in market growth, and uncertain global economic influences.

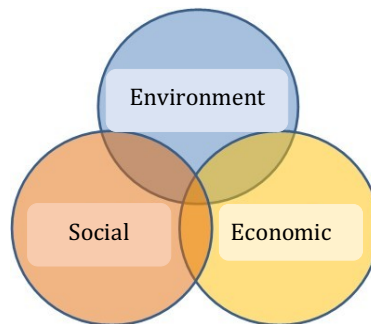


Figure 1. Triple Bottom Line Model

Kotler (2016) pushes social and ecological issues into business strategy because social business has become an integral part of business rhetoric and scientific literature. Sustainable business is a new addition to comprehensive business development. Sustainable business includes environmental business, green business, and social business. Researchers regard it as a more ethical form of business that advances without straining the environment and still meets the needs of present and future generations. Grubor & Milovanov (2017) define sustainable business as “the process of planning, implementing, and controlling the development, pricing, promotion, and distribution of products in a manner that meets the following three criteria (1) customer needs are met, (2) organizational goals are achieved, and (3) the process is following the ecosystem”. Sustainable business requires a long-term orientation on relationship building rather than the conventional short-term focus on transactions in modern business.

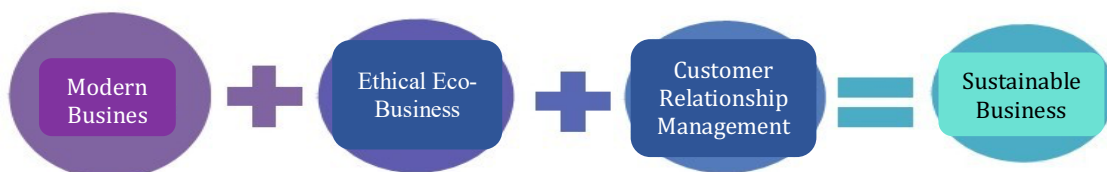


Figure 2. Modern Sustainable Business Scheme

Consumers' interest in choosing alternative environmentally friendly products has increased drastically, accompanied by their expectations of improving entrepreneur services. Although there is an attitude-behavior gap, there is an inconsistency between consumer attitudes and buying behavior (Grubor and Milovanov, 2017). Any indoctrination cannot mislead Maury (2018), the new generation of consumers. However, Osman et al. (2016) consumers look for companies and brands that they feel have a genuine commitment to environmental and social issues. Companies can only create business value by bringing together their vision of sustainability and the expectations of 21st-century consumers. Millennial consumers growing up economically and empowered by new technology and social media are driving new hopes for all institutions in society, especially industry. Today's consumers expect immediate benefits from products and services, but they also want to improve people's health and well-being. In addition, due to the global recessionary economic cycle, consumers are becoming more 'Mindful'.


The use of the term sustainable strategy is often to describe and determine the goals to be achieved by the company through the number of businesses it wants to enter, produce decisions and policies to achieve these goals and define the scope of business through the business portfolio selected by the company. A sustainable strategy is overall long-term planning regarding what businesses the company wants to have by purchasing various businesses and what is desired in the business as part of sustainability, as well as how the company creates configuration value in creating synergies from its multi-business activities. Formulating a sustainable strategy for the company is carried out by relentlessly focusing on the core business: improving product quality, increasing product value, reducing environmental impact, and increasing customer brand awareness. The considerations that drive companies to carry out this strategy are the desire to guarantee production by increasing the stability and certainty of supply in terms of quantity, quality and continuity (Papadas et al., 2019). Each sustainable business strategy also aims to help MSMEs build and take advantage of certain competitive advantages within the scope of industrial competition. How MSMEs integrate the activities they carry out in each of the different business-level strategies shows how the results of their business performance differ. The effectiveness of a sustainable business-level strategy is highly dependent on the opportunities and threats in the external environment and the strengths and weaknesses emanating from the MSME's internal resource portfolio. Therefore, MSMEs need to choose a sustainable business-level strategy based on a match between the availability of opportunities and threats in the external environment with their internal organizational strength as indicated by their core competencies (Pappas et al., 2018).

1) Leadership Strategy: The cost of a cost leadership strategy is a set of integrated actions taken to produce goods or services at a price acceptable to customers at the lowest when compared to competitors. MSMEs using a cost leadership strategy usually sell standardized goods or services to the industry's most distinctive customers. Process innovation, which are newly designed production and distribution methods and techniques that enable companies to operate more efficiently, is critical to successfully using a cost leadership strategy. 2) Differentiation Strategy: A differentiation strategy is an integrated set of actions taken to produce goods or services (at an acceptable cost) that customers find different in ways that are important to them. While a cost leader serves ordinary customers in an industry, a differentiator targets customers whose value is created by how MSMEs' products differ from products manufactured and marketed by competitors. Product innovation, namely generating new ways to solve customer problems - through the development of new products or services - that benefit customers.

3) Focus Strategy: A focus strategy is a series of integrated actions undertaken to produce goods or services that serve the needs of a particular competitive segment. Thus, MSMEs employ a focus strategy as they leverage their core competencies to serve the needs of a particular industry segment or niche to exclude others. Examples of specific market segments that a focus strategy can target include (a) certain groups of buyers (youth or older people); (b) different product segments; or (c) different geographic markets. 4) Integrated Leadership / Differentiation Strategy: The purpose of using this strategy is to produce products with several different features efficiently. Efficient production is the source of maintaining low costs, while differentiation creates unique value. Companies that successfully use an integrated cost leadership/differentiation strategy usually adapt quickly to new technologies and rapid changes in their external environment. Simultaneously concentrating on developing the two sources of competitive advantage (cost and differentiation) increases the number of key and support activities in which a firm must become competent. Such companies often have strong networks with outsiders that complete some of the key activities and support. In turn, having skills in a more significant number of activities makes the company more

flexible. The generic strategy concludes that companies can combine and implement various generic strategies. Competitive advantage grows from the value or benefits that MSMEs can create for their customers through one of the four sustainable strategies that have been presented. They hope to increase their skills and resources and provide more value than their competitors. The implementation of which level of business strategy can be carried out by MSMEs must follow market conditions, community needs, and available resources through a point of view approach that is seen from a causal relationship with the dimensions of competitive advantage, including (a) Product Excellence; (b) Service Quality Excellence; (c) Personnel Excellence; (d) Image Excellence; and (e) Advantages of Distribution Channels (Putra et al., 2020).

Table 1. Differences between Traditional Business Mix and Sustainable Business Mix

Traditional Business Mix		Sustainable Business Mix
<i>Product</i>		<i>Customer Solution</i>
<i>Price</i>		<i>Customer Price</i>
<i>Promotion</i>		<i>Convenience</i>
<i>Place</i>		<i>Communication</i>

(Eneizan et al., 2016).

According to Qashou & Saleh (2018), Overall, the dimensions of the cost leadership strategy are included in the "high" category because it has high product quality with low production costs. For the dimensions of the differentiation strategy, it is classified as a "high" category because it provides a different quality of service from competitors and products that are difficult to imitate. The "high" sort includes the focus strategy dimension because it focuses on its target market supported by a unique and sophisticated product identity. In comparison, the integrated differentiation strategy is included in the "high" category because it maintains good relations between customers and suppliers to impact achieving the target market. However, the side effect is that most MSMEs feel comfortable and do not expand. Rao & Rajeswari (2020) The assisted MSMEs in West Java Province, which are engaged in the creative industry, have been able to apply their business strategy, which means that this strategy is due to an image advantage through a good reputation for customers, service quality excellence that meets customer needs, innovative product advantages, low production costs through applying the observe, imitate, modify method (ATM method) and the selling price given can be affordable according to the quality of the product it sells. However, it is not optimal and still follows the average market price, so it is similar to competitors. In addition, the superiority of human resources is relatively high even though it has yet to maximize employee competence as a whole, with a lack of creativity and knowledge about entrepreneurship.

Verma (2021) seeks to explore the impact of sustainable business practices on brand equity and consumer behavior. The level of competitive advantage in the fostered MSMEs is classified as the "high" category. However, there are still indicators that need to be improved, namely price and product advantages. Thus, this finding means that, on average, the MSMEs assisted by West Java Province do not have differentiators or do not compete in price and product but excel in service quality, image, and distribution channels. Setiowati et al. (2015) explain that when companies enjoy an ethical form of business, consumers feel valued and develop brand loyalty. The company's concern for society and the environment has indeed changed consumer behavior, leading to an increase in brand equity. Consumers choose products based on available information. Sustainable business plays an essential role in strengthening awareness about society. Evidence shows that consumers are willing to pay a premium when they recognize the importance of sustainable products and services.

METHOD

This type of research uses exploratory qualitative. Qualitative research is intended to gather information about the status of an existing symptom, namely the state of symptoms according to what they were at the time of the study. Therefore, qualitative research can reveal phenomena in a subject one wants to study (Igwenagu, 2016). The data type is primary data with data collection techniques using the interview method. The sampling design uses non-probability sampling (snowball), a method used to identify, select and take samples in a network or continuous chain of relationships. The samples were 64 MSMEs to provide an alternative solution more effectively.

MSMEs are defined to include micro firms (<10 employees), small firms (10–49 employees) and medium-sized firms (50–249 employees). This research interviews MSME owners assessed and classified by SME departments as having technological infrastructure readiness, stable financial conditions, availability of employees according to operational standards, and the ability to implement sustainable digital business programs. They were also selected to ensure the provinces serve as a role model to other provincial governments in implementing immediate economic recovery plans. Our interview questions were designed to give more prominence to the case than the interviewee while acknowledging that the way the interviewee sees the case operating is essential knowledge, and we found out the interviewee's background to understand their interpretations as well. The collecting data method was through face-to-face and in-depth online interviews. The list of interview questions asked included: 1) What social media accounts does your business have? 2) How does technology affect your business performance? 3) How does technology support the sustainability of your business? 4) Do you want to apply the latest technology in your business? 5) What are your reasons for implementing technology in your business for the long term? 6) How do you use technology to attract millennial consumers? 7) How does the environment affect your ability to meet consumer expectations?.

RESULT AND DISCUSSION

Sustainable Digital Business Strategy: Creating Value for Customers

The sustainable business strategy to create customer value combines three main elements: brand, operations and employees. The MSMEs use profitable volume growth, cost and efficiency advantages, innovation and marketing investment to increase profits. MSMEs achieved growth and strengthened their position in the market by focusing on improving people's welfare, reducing environmental impact, and expanding the use of technology. The advantage of assisted MSMEs to create more value for their customers can also obtain higher profits. The value generated from a competitive strategy can explain a position in an industry as a cost leader or leader in terms of uniqueness. The value that must be created in the context of competition is something that consumers, such as low prices, quality products, well-known brands, unique features and distinctive product attributes, and after-sales service seek. Value creation can increase the business value of the MSMEs by increasing market share and sales and can impact rising share prices. The sustainable value obtained by MSMEs through strength in innovation has been proved by launching a series of innovative products. This demonstrates that the MSMEs have achieved excellence in various ways, including strengthening their distribution partners and aggressively developing new markets (Hardilawati, 2020). For this reason, it is important to discuss sustainable strategies in realizing sustainable value, which is a form of strategy to achieve premium margins related to creating and accepting customers for new products or services. Innovation is also a way to create new resources, produce a competitive advantage or utilize existing resources by increasing their potential to generate above-average profits.

Sustainable competitive advantage is everything that is done very well by MSMEs compared to what is done by their competitors. Sustainable competitive advantage can be achieved by continuously adapting to follow trends in the market, adjusting competition issues and increasing capabilities, and increasing core competencies and internal resources (Müller, 2019). MSMEs can formulate and develop strategies that competitors cannot implement, doing things that competitors cannot do in the long run. In realizing sustainable growth, MSMEs should directly involve stakeholders, such as collaborating with several major suppliers to improve control over the supply of raw materials, resources or services. The contribution of MSMEs in avoiding negative environmental impacts by reducing waste and factory waste, reducing operational costs, and increasing positive social impact through collaboration with key suppliers to improve their livelihoods. MSMEs' commitment to realizing sustainable value through programs to increase welfare and assistance, digitizing business operational systems, and reducing environmental impact by committing to reduce the greenhouse gas effect of their product portfolio. Sustainable competitive advantages possessed by SMEs to meet customer expectations, namely differentiation advantage and cost advantage. A sustainable competitive advantage arises when MSMEs can produce the same products as their competitors but have lower production costs or produce products/services that are different and better than those produced by their competitors.

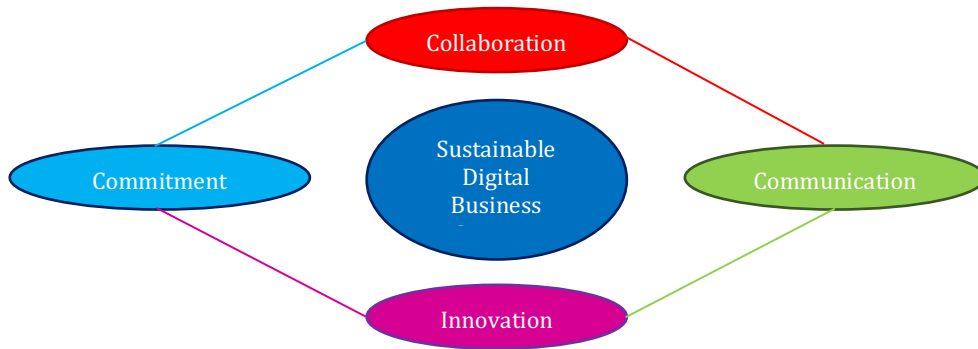


Figure 3. Sustainable Digital Business Strategy Initiation Model To Improve MSME Capability Meet Consumer Expectations

Table 2. Four Dimensions of the MSME Sustainable Digital Business Strategy Model

Dimension	Indicators
Innovation	Product/Process/Business (with advanced technology)
Collaboration	NGOs/Government/other organizations; Environmental protection campaign
Communication	Continuous communication with stakeholders and upholding transparency
Commitment	Constant involvement with consumers and business division

Digital businesses can be used to achieve their vision of sustainable practices in competitive advantage, brand loyalty, risk mitigation, and cost reduction. Researchers prove that the sustainability practices adopted by MSME actors can attract more investors to MSME actors. This can also lead to an increase in the market value of MSMEs. The social performance of an MSME actor still tends to reduce the financial performance of an MSME actor. More research is needed to prove a positive correlation between the two. The recent economic, financial, and environmental crises demand more sustainable social development than economic growth. Businesses can direct this sustainable development with social responsibility, environmental mitigation, and targeted strategies. With public concerns, growing environmental concerns, stricter regulations, and sustainable business practices are unavoidable. Marketers must adopt sustainable practices to avoid stakeholder criticism but must still determine consumer purchasing decisions.

At least MSMEs need to be prepared to think about several challenges, such as: 1. In the context of a value proposition, namely the implementation of the triple bottom line and the integration of technological innovation with business model innovation; 2. In the context of value creation, namely changing mindsets, resource management, and methods and tools; 3. In the context of value capture, namely relations with externals. Then the same thing also allows MSMEs to capture economic value by providing social and environmental benefits through the company's key activities, resources, partners, and technology. MSMEs carry out value creation through cost and income structure activities to minimize the risk of unsuccessful implementation of a sustainable business model, and it is necessary to categorize a sustainable business model in which all business activities lead to this category, namely: 1. Maximize material and energy efficiency; 2. Create value from 'throw away' (zero waste); 3. Substitute with renewable energy and natural processes; 4. Provide functionality, not ownership; 5. Adopt the role of service administrator; 6. Encouraging adequacy; 7. Redirecting business to society/environment; 8. Develop upgrade solutions. A sustainable business model should integrate various aspects to enable transformation and organizational activities related to sustainability, bringing economic and competitive advantages to the company.

MSMEs that commit to driving the spirit of business sustainability not only pursue profit but also supply chain balance between business people means smart and shining consumers. Concerning the value proposition, the main requirements for the traded products are quality and marketable products. The MSME consumer segment should also be analyzed from the start so that the value created is in line with what is expected, such as consumers who care about the welfare of society, consumers who care about the environment, and consumers who can use sophisticated technology. The hope is that with the "STIMBUT" sustainable business strategy, consumers can meet direct producers who have quality products and can meet expectations as expected. Concerning value

creation, MSMEs are always committed to providing sustainable social benefits based on the use of digital technology through a continuous mentoring process so that they can move up to a higher level. This mentoring process is also facilitated by the Department of Industry and Trade, fellow members of the assisted MSME community, and even consumers who provide input on their products. Another key activity is training for MSMEs related to business development and works SOPs so that their businesses experience quality improvement. Regarding capturing value, MSME financial reports are still simple but have been published periodically so that the business processes are transparent. Judging from its internal strength, MSMEs in developing their products align with the triple bottom line aspect because it is not easy and must be gradual. However, MSMEs can solve this limitation by implementing the "STIMBUT" sustainable business strategy, which is comprehensively able to accommodate the needs of MSMEs to meet consumer expectations.

CONCLUSION AND RECOMMENDATION

The "STIMBUT" sustainable business strategy based on the triple bottom line concept influences economic, social, and environmental sustainability. A sustainable business strategy helps economic sustainability by building credibility for sustainable business efforts and solutions. Areas of credibility that must be obtained include MSME brands and products offered, responsible use of products, and disposal practices. Another form of support provided by the "STIMBUT" sustainable business strategy consists of developing and marketing higher quality products based on digital technology with social impact based on continuous innovation, durable products, and sustainable brand development, which offers practical benefits such as better ratio quality/price and costs/undesirable effects on resources and the environment. Social sustainability is enhanced by teaching consumers how to solve problems critical to maintaining and strengthening sustainable development. Another contribution of the "STIMBUT" sustainable business strategy is reflected in creating jobs and a significant increase in operating income. Production and consumption of sustainable products and services that have qualified for more extended use can increase labor capacity and people's welfare. By implementing digital technology-based strategies, consumers are stimulated by providing products with added value in futuristic and environmental preservation. The synergy between the "STIMBUT" sustainable business strategy and sustainable development does not appear as an expression but as a necessity, which means that the "STIMBUT" sustainable business strategy must continuously review its place and role and organizational activities in the sustainable development function. This can be done by utilizing comprehensive industrial control and establishing a metric system based on applicable regulations. It is crucial for MSMEs to continually evaluate development management methods and governance, which should include creative economic processes, business concepts, and adaptive living philosophies in the digital era. This research's limitation is the data collection, which is quite challenging to identify due to the non-existent company administration, low technological capabilities, and limited market coverage. In addition, the sample studied is still general, it is necessary to study a specific sample group. So future research needs to be checked more comprehensively in developing a sustainable business strategy that can support the development of MSMEs to a higher level.

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The Role of Good Corporate Governance in Moderating the Effect of Financial Ratio on Financial Distress (Study of Consumer Sector Companies Listed on the Indonesia Stock Exchange Over Period 2018-2020)

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Abstract

Financial distress is a condition where management fails to manage company finances. This study aims to determine the effect of leverage, net profit margin, liquidity, and sales growth on financial distress with corporate governance as a moderating variable. This sample used all consumer goods sector companies listed on the Indonesia Stock Exchange for the 2018-2020 period. Sampling was used with the purposive sampling technique and selected 25 companies. Data analysis used multiple linear regression and the absolute difference value test. The results are that the variables of leverage, net profit margin, and liquidity affect predicting financial distress. Meanwhile, sales growth does not affect financial distress. As measured by managerial ownership, corporate governance can moderate the effect of liquidity on financial distress. Still, it cannot moderate the effect of leverage, net profit margin, and sales growth on financial distress.

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INTRODUCTION

The development of the industrial revolution 4.0 began to affect the level of the Indonesian economy. The effect of globalization causes competition between one entity and another entity in favor of each product. If the company is not able to adapt in this global era, the condition of financial distress will adversely affect the company's performance. The impact of financial distress certainly has an impact on all aspects of life, including the consumer goods sector. Most companies that are engaged in fulfilling public consumption have an effect on economic conditions because the average company's income comes from products and promotions offered to attract customer interest.

In *cnnindonesia.com* news, Safira Primadhyta explained that the achievement of economic growth was dominated by household consumption. This statement is assisted by data from the Central Statistics Agency which shows the achievement of gross domestic product (GDP) in 2018-2020. Indonesia's economic growth has decreased in a row from 2018-2020. The economic growth rate in 2018 was 5.17%, 2.74% supported by household consumption. In 2019, the Indonesian economy experienced a decline of 4.97%. This was followed by Indonesia's economy, which worsened in 2020, dropping drastically to 2.97% in the first quarter, which in turn had a negative impact at -5.32% and -3.49%.

News from *nasional.kontan.co.id* by Grace Olivia explained that the consumer goods sector began to experience a slowdown in growth since 2019 due to the global economy. The research results determined that the consumption sector was only able to achieve growth of 4.97% in 2019 which was lower than 2018 and was followed by 2020 which only grew by 2.63%. This proves that business competition around the world is getting sharper by presenting various local and imported brands.

This phenomenon illustrates that the company's management is not optimal in facing business competition so that the company's performance declines. Financial distress arises because the company cannot cope with operational costs. The main source of information on the company's financial performance in making decisions for the next step comes from the financial statements. Financial statements are the company's benchmark in predicting whether the company is in financial distress.

Financial distress is influenced by leverage (Utami, 2021). The higher the DER value, the higher the company's rate of return to creditors and can trigger financial distress if the company is unable to pay off its obligations. This is in line with research by Ramadhan (2017), Jaafar et al. (2018), Giarto & Fachrurrozie (2020), and Utami (2021) concluding that financial distress is influenced by leverage. The debt ratio was also found in Murni (2018), Oktariyani (2019), Fajriana & Kaluge (2019), and Hakim et al. (2020) which shows that it has no effect in predicting the risk of financial distress. The second factor that can be seen from the achievement of company profits is using the net profit margin ratio. The larger the company is able to record profits, the less likely it is to experience financial distress because the profits generated are able to cope with the company's obligations. This research was supported by Murni (2018), Fajriana & Kaluge (2019), and Balasubramanian et al. (2019) which states that NPM has an effect on predicting financial distress conditions. However, the results of this study are not in line with Sudaryo & Dkk. (2021) which states that NPM has no effect on financial distress.

Another influence can be caused by liquidity and sales growth. Liquidity can assist companies in managing asset requirements to pay off short-term liabilities (Hakim et al., 2020). Several researchers, namely Yudadibrata & Soenarno (2016), Ramadhan (2017), Balasubramanian et al. (2019) and Hakim et al. (2020) reveal that the condition of company failure affects the company's liquid management. However, according to Amanda & Tasman (2019), Fajriana & Kaluge (2019), and Utami (2021) explain that the current ratio has no effect in predicting financial distress. Sales growth illustrates if the company is able to target sales in the previous year, it indicates the company has a good strategy in managing the company. This statement is supported by (Yudadibrata & Soenarno, 2016), (Amanda & Tasman, 2019), and Fajriana & Kaluge (2019) that financial distress is influenced by sales growth.

In addition to the percentage of financial ratios, to strengthen or weaken these variables on financial distress, it is moderated by good corporate governance. Corporate governance is proxied by managerial ownership structure. Managerial ownership is often defined as the percentage of shares in the company's management (board of directors and commissioners) that take part in decision making. This is supported by research from Giarto & Fachrurrozie (2020) which states that managerial ownership is able to moderate the effect of leverage and sales growth on financial distress and research from Setyobudi (2017) which states that managerial ownership is able to moderate the effect of liquidity on financial distress.

Phenomena that still occur and there are still inconsistencies between one study and another need to be re-examined. Therefore, the formulation of the problem taken in processing this research are: 1) Is financial distress influenced by leverage ratio, net profit margin, liquidity, and sales growth?; 2) Is managerial ownership able to moderate the effect of leverage, net profit margin, liquidity, and sales growth on financial distress?.

Agency theory is a theory that explains the business relationship between principal and agent who have different tasks/interests even though the management of the company is carried out together (Jensen & Meckling, 1976). The existence of a separation of duties that occurs causes information asymmetry between the two parties, where the proportion of company information is more owned by agent than principals. Given that managers understand the ins and outs of the company in detail, so managers also want to achieve their own benefits from the tasks.

Agency problems require a better foundation for corporate governance. The establishment of good corporate governance in each company has an influence on agent to always comply with the business relationship that has been mutually agreed upon with the principal so that the company's performance can be achieved according to the same path.

Hypothesis

The leverage comes from financial activities. Agent is given the task of making decisions on the percentage of funds to be taken in managing the company's long-term operations. If later it is known the total debt is high, the agent's performance in managing the company needs to be investigated further to avoid the risk of financial distress. The results of the study are also supported by Jaafar et al. (2018), Giarto & Fachrurrozie (2020), and Utami (2021) which show that leverage has an effect on financial distress.

H₁ : Financial distress is influenced by leverage.

Net profit margin describes the company's ability to generate profits from sales activities. If the NPM generated is large, the profits obtained by shareholders will increase so that investors believe that they will continue to invest their capital and earn profits so that the risk of financial difficulties can be avoided. This is in accordance with the agent theory which states that the owner's goal is to increase the value of the company for the prosperity and profit of the owner or shareholders. The results of the study are also supported by Balasubramanian et al. (2019) which show that net profit margin has an effect on financial distress.

H₂ : Financial distress is influenced by net profit margin.

Liquidity has a view of the extent to which the company's ability to manage asset requirements to pay off short-term liabilities and fund operational costs. The high assets owned by the company indicate that the level of liquidity can exceed short-term debt. High liquidity will affect the prediction of the company's financial difficulties will decrease. This research is also supported by Ramadhan (2017), Murni (2018), and Hakim et al. (2020) which states that financial distress can be influenced by the current ratio.

H₃ : Financial distress is influenced by liquidity

Sales growth describes the percentage rate of rise and fall of profit on the company's sales activities. If the previous period's sales rate was low or decreased, it is likely that the company will experience financial distress which will affect asset, debt and profit items in the company's financial statements. This is related to the research of Jaafar et al. (2018), Fajriana & Kaluge (2019), Giarto & Fachrurrozie (2020) which reveal that sales growth has an influence in predicting financial distress.

H₄ : Financial distress is influenced by sales growth

A company can minimize the risk of financial distress by using managerial ownership. From the agency theory point of view, the measurement of the leverage ratio accompanied by the distribution of managerial shares to agents will minimize the occurrence of agency conflicts. With managerial ownership, management is able to make better funding decisions so as not to harm all parties by being selective in debt. Management can choose debt with a lower level and has a target of having funds to pay off obligations according to maturity.

H₅ : Managerial ownership is able to moderate the effect of leverage on financial distress.

Financial distress can be avoided if the company makes performance improvements, one of which is by giving a percentage of shares to management who participate in managing the company. The function of agency theory related to this situation is to know the role of managerial ownership in increasing firm value so that management can account for its performance to investors. The efforts that agents can do include decisions to increase profits by expanding the target market, holding attractive promos, and improving product quality.

H₆ : Managerial ownership is able to moderate the effect of net profit margin on financial distress.

Agency problem can be reduced by managerial ownership. Agency theory shows that the agent is trusted by the principal in managing the company's liabilities and receivables. Determination of liabilities and receivables of course must also be adjusted to the company's liquid fulfillment. From the statement

above, agent has a privileges to make strategy so that the debt owned by the company is not too high. With managerial ownership, it is expected to be able to regulate the behavior of agents who want to be selfish for the benefit of one party (Setyobudi, 2017). This has a positive impact on the corporate governance system in meeting its short-term obligations so that the company remains in a stable condition and does not experience financial distress.

H₇ : Managerial ownership is able to moderate the effect of liquidity on financial distress.

Sales growth is a target that must be achieved in maximizing company performance. In the business world, principal put their trust in management (agent) to manage the company in terms of increasing profits through sales growth. However, usually not all directions from the principals are carried out by the agents, causing agency problem. This conflict can be resolved by implementing a good governance system, one of which is managerial ownership. High managerial ownership encourages management that all strategies designed by agents must be based on common interests and the welfare of the company. Agents will continue to strive to increase the company's value by targeting annual sales and reducing operational costs.

H₈ : Managerial ownership is able to moderate the effect of sales growth on financial distress.

Financial distress can be analyzed through financial statements that show the company's financial performance for 1 period. Financial distress can be predicted from the way the company's debt, assets, and capital are managed in relation to the leverage and liquidity variables. In addition, a decrease in net profit which leads to a loss causes the company to be threatened with financial distress which can be investigated with the net profit margin variable. In addition, financial distress also came from declining sales targets so that the income generated was smaller than the costs incurred.

H₉ : Leverage ratio, liquidity, net profit margin, and sales growth have a simultaneous effect in predicting financial distress.

METHOD

The type of data used quantitative research sourced from secondary data were collected using documentation technique. The population used all consumer goods sector companies listed on IDX from 2018-2020 with a total of 63 companies. Sampling technique used a purposive sampling with several criteria including: 1) Consumer goods sector companies listed on the Indonesia Stock Exchange for the 2018-2020 period; 2) Consumer goods sector companies that report financial statements and annual reports in a row for 2018-2020; 3) Consumer goods sector companies whose financial statements have a managerial ownership structure percentage in a row for the 2018-2020 period. Furthermore, the data analysis tool used IBM SPSS 20 to analyze the classical assumption test, regression analysis, and moderation test.

Table 1. Secondary Data Processed

No.	Criteria	2018	2019	2020	Total
Population		51	54	63	168
Sample :					
1	Consumer goods sector companies listed on the IDX for the 2018-2020 period	(2)	(5)	(14)	(21)
2	Companies that dont have a managerial ownership structure from 2018-2020.	(24)	(24)	(24)	(72)
Sample Data					75

The operational definition of variables in this study consisted of 4 independent variables, 1 dependent variable, and 1 moderating variable. The independent variables used leverage which is proxied into the debt equity ratio obtained from total debt divided by total equity. Net profit margin is calculated from the comparison of total net profit after tax with total sales. Liquidity is proxied into the current ratio calculated from total current assets divided by total short-term debt. The last is sales growth which is calculated from the total sales of the previous period minus the total sales of the current period.

Furthermore, the dependent variable in this study is financial distress, where to predict the company's financial condition is in a healthy condition or not using the Springate formula, namely: $S = 1.03(X1) + 3.07(X2) + 0.66(X3) + 0.4(X4)$ where, 1) X1 is calculated from the ratio of working capital to total assets; 2) X2 is the ratio of EBIT to total assets; 3) X3 is the calculation of EBT on total assets; and

4) X4 is the comparison of sales on total assets. The final result of the calculation states that if the S-score < 0.862 then it has the potential to financial distress. If the S-score is between 0.862 and 1.062, it is predicted that it is prone to bankruptcy and if the S-score is bigger than 1.062, the company is in a healthy condition. The moderating variable used is managerial ownership. Managerial ownership can be calculated from the comparison of the number of management shares in the current period with the number of shares outstanding in the period concerned.

RESULT AND DISCUSSION

Descriptive Statistic Test.

Table 2. Descriptive Statistic Test

Variabel	Min.	Max	Mean	Std. Deviation	N
LEV	0,1301	5,3701	0,959828	0,8491484	75
NPM	-0,6837	0,186	0,027473	0,1077723	75
LIKUID	0,6166	13,2673	3,147911	2,9958619	75
SALES GROWTH	-0,4471	0,5854	0,049923	0,1782943	75
FINANCIAL DISTRESS	-0,9461	2,5532	1,176903	0,755119	75
KEP. MANAJERIAL	0,0002	0,683	0,121129	0,1970507	75
Source : Output SPSS processed, 2022					

Starting with a descriptive statistical test that contains a summary of the data for all variables by presenting the minimum value, maximum value, average value (mean) and standard deviation.. In table 2 it is explained that these variables are NPM, SALES GROWTH, and KEP. MANAJERIAL has a high standard deviation value from the mean value which indicates the level of variation in the data from each variable is big. Meanwhile, the LEV, LIKUID, and FINANCIAL DISTRESS variables have a standard deviation value that is smaller than the mean value which indicates the level of variation in the data from each variable is small.

Table 3. Normality Test

	Unstandardized Residual
Kolmogorov-Smirnov	1,044
Sig. (2-tailed)	0,225
N (total data)	75

The probability value generated by the 1 sample K-S test in table 3 is greater than the specified significant limit of 0.05 (0.225 > 0.05) so that the hypothesis is accepted and the assumption of normality is met.

Table 4 explains that the tolerance value of each variable is greater than the cut-off value of 0.10 and the VIF value of each variable does not exceed the cut-off limit of 10.00. It can be concluded that there is no multicollinearity between the independent variables in the regression model.

Table 4. Multicollinearity Test

Model	Multicollinearity Test		Results
	Tolerance	VIF	
LEV	0,802	1,247	multicollinearity free
NPM	0,759	1,317	multicollinearity free
LIKUID	0,828	1,207	multicollinearity free
SALES GROWTH	0,789	1,268	multicollinearity free
KEP. MANAJERIAL	0,957	1,045	multicollinearity free

Table 5 describes the dw value of 2.058. The dw value based on the Durbin-Watson table is between the dU value and the 4-dU value so that $1.769 < 2.058 < 2.230$, so that the data does not occur autocorrelation.

Table 5. Durbin-Watson Test

Mode	Durbin-	Keputusan
1	2,058	Terbebas dari gejala

The results of the significant value with the park test of all the variables used in this study are bigger than the significant limit of 0.05, which means the residual variance value of each observation remains (homocedasticity).

Table 6. Park Test

Model	Sig	Results
LEV	0,6	Homocedasticit
NPM	0,3	Homocedasticit
LIKUID	0,8	Homocedasticit
SALES GROWTH	0,3	Homocedasticit
KEP. MANAJERIAL	0,3	Homocedasticit

Hypothesis Test

Leverage ratio has an effect on predicting financial distress

The result of the significant value obtained is 0.004. This value is smaller than the significant limit of 0.05 which states that the prediction of financial distress can be influenced by the leverage ratio. The results of this study are supported by Ramadhan (2017), Jaafar et al. (2018), Giarto & Fachrurrozie (2020), and Utami (2021) which show that leverage has an effect on predicting financial distress. This is the reason that the higher the value of leverage, the condition of the company's financial distress also increases because more often agents carry out financing activities on third people so that the liabilities they have is getting bigger and unable to pay their obligations when they fall due. However, the results of this study are not in line with Firasari & Saparila (2018), Murni (2018), Finishtya (2019), Fajriana & Kaluge (2019), and Hakim et al. (2020) which shows that leverage has no effect in predicting financial distress.

Net profit margin ratio has an effect on predicting financial distress

Based on t-test, the results of the net profit margin on financial distress are 0.004 ($0.004 < 0.05$) which states that NPM influences predicting financial distress. A high NPM can also be financial distress. This can happen because if the company is able to generate high profits, it tends to be used for the benefit of the owner of the capital itself, while the percentage is smaller for paying the company's obligations. The results of this study are supported by Murni (2018), Fajriana & Kaluge (2019), and Balasubramanian et al. (2019) which states that net profit margin has an effect on financial distress. However, it is different from the research conducted by Sudaryo & Dkk. (2021) which states that net profit margin has no effect on financial distress.

Liquidity ratio has an effect on predicting financial distress

Based on t-test, the results of the liquidity on financial distress are 0.000 ($0.000 < 0.05$) which states that liquidity influences financial distress conditions. The results of the study are in line with Yudadibrata & Soenarno (2016), Zulfa (2018), Ramadhan (2017), Balasubramanian et al. (2019), and Hakim et al. (2020) that the liquidity ratio has an effect in predicting financial distress. This reason is strengthened by the higher of current ratio, the more company assets are hoarding and not needed so that they dont provide income. A large amount of funds will be collected in the form of uncollectible accounts receivable. These receivables can't be used to pay debts so that it can pose a risk of financial distress. This research is not supported by Murni (2018), Amanda & Tasman (2019), Fajriana & Kaluge, (2019), and Utami (2021) which show that liquidity has no effect financial distress conditions.

Sales growth ratio has an effect on predicting financial distress

Based on the results of t test, the significant value of sales growth is 0.165, which is bigger than the significant limit ($0.165 > 0.05$), so it is stated that sales growth has no effect on financial distress. The results of the study were supported by Jaafar et al. (2018) and Giarto & Fachrurrozie (2020) which state

that sales growth has no effect in predicting financial distress. The increase in sales every year must also be followed by a high percentage of the cost of goods sold so that the net profit is low. Earning a small profit is also not necessarily able to pay off the company's obligations if the debt owned by the company is large. The results of the study are different from Rahayu & Sopian (2017) Amanda & Tasman (2019), and Fajriana & Kaluge (2019) which state that sales growth influences financial distress conditions.

Table 7. T-test Step 1

Model	t	Sig	Keputusan
LEV	-2,992	0,004	H1 accepted
NPM	6,834	0,000	H2 accepted
LIKUID	4,282	0,000	H3 accepted
SALES GROWTH	1,402	0,165	H4 rejected

Source : Output SPSS processed, 2022

Managerial ownership is able to moderate the effect of leverage on financial distress

The results of the t-test data processing show that managerial ownership is not able to moderate the effect of leverage on financial distress with a significant value of $0.242 > 0.05$. This does not support the agency theory where the difference in interests can be minimized with agency costs through the provision of incentives in the form of share ownership in management, but if we look further, share ownership in consumer goods sector companies is still relatively low and below 5%. This is a tendency for management to be less efficient in managing the company so that the level of debt owned by the company remains high. This study are in line with research conducted by Setyobudi (2017) and Komala & Triyani (2020). which states that managerial ownership is not able to moderate the effect of leverage on financial distress.

Table 8. T-test Step 2

Model	t	Sig	Keputusan
LEV_KM	-1,181	0,242	H5 rejected
NPM_KM	1,956	0,055	H6 rejected
LIKUID_KM	-2,329	0,023	H7 accepted
SG_KM	-0,300	0,765	H8 rejected

Source : Output SPSS processed, 2022

Managerial ownership is able to moderate the effect of net profit margin on financial distress

In this study, managerial ownership is not able to moderate the effect of NPM on financial distress because the significant value was $0.055 > 0.05$. This value is greater than the significant limit so that managerial ownership cannot moderate. The results of this study are not in line with agency theory which states that managerial ownership is able to harmonize differences in interests between shareholders outside management. The low percentage of managerial share ownership is also the impact of management being less motivated in making decisions to increase profits and expand the target market to minimize the risk of financial distress.

CONCLUSION AND RECOMMENDATION

Leverage, NPM, and liquidity influence financial distress, but sales growth has no effect on financial distress. Managerial ownership can moderate the effect of liquidity on financial distress, but on the other hand managerial ownership is not able to moderate the effect of leverage, NPM, and sales growth on financial distress is the conclusion of this study. The limitation of the research lies in the lack of managerial ownership as a moderating variable. This proves that management share ownership in public companies in Indonesia is still relatively low.

Suggestions for this research are especially for each company to minimize agency problems in other ways such as increasing institutional ownership supervision and for further researchers to be able to

add or try other corporate governance moderating variables to prove the role of corporate governance in predicting financial distress.

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Perceptions of International Tourists on Internationalization of Hospital Services in Post-Pandemic Manado: A Hospital Service Marketing Approach

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Abstract

This study aims to determine the impact of the internationalization of several types of A and B hospitals in Manado and its surroundings. The Ministry of Tourism declared Manado as one of the main destinations in Indonesia. How promote and bring in foreign tourists must be accompanied by security guarantees, the main ones being health insurance and access to international insurance when in tourist destinations. The research method was carried out by convenient purposive sampling at the inns and hotels of tourists. The results of the research stated that all foreign tourists have positive perceptions and beliefs about the existence and services of international hospitals in Manado; the thing that still makes them doubtful is the completeness of international standard hospital facilities. Still, these doubts can be overcome with reassurance with evidence.

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INTRODUCTION

The world is increasingly recognizing the name of the provincial capital of North Sulawesi. This city, located at the tip of the peninsula of Sulawesi Island, has successfully hosted national and international events. Since the World Ocean Conference (WOC) success, a global event has been held alternately in Manado. CTI-Summit, Sail Bunaken, and the Asia Pacific Conference are proof this area is starting to get the trust to become a MICE city (Meeting, Incentive, Conference, and Exhibition). North Sulawesi has been designated as one of the leading tourist cities in 10 regions in Indonesia. This area is known by people who smile (Wisata Sulut, 2019).

The city of Manado continues to strive to become the second Bali. Still, the city of Manado is leading the way toward the City of Ecotourism, that is the hallmark of this region. With the increasing number of events and the growing number of tourists, Manado's tourism sector is automatically getting excited. In 2019, the leading industry experienced a significant increase. The occupancy rate of hotels, visitors to diving resorts, restaurants, and tour and travel continues to grow. In 2019, the total number of Manado tourism businesses was 939. Tour 77 pieces of travel, diving centers (24), nightlife (187), star hotels (15), restaurants (205), and restaurants (315). This number has increased compared to 2018 with 556 and 2017 with 551 (Wisata Sulut, 2019).

The Central Statistics Agency (B.P.S.) has data for February 2019, with as many as 1,552 tourists visiting the area. From year to year, there has been an increase in the population of as many as 381 people (32.54 percent). There were 1,552 men, and it dominated mainly by China with 391 people (25.19 percent), America with 119 people (7.67 percent), Germany with 115 people (7.41 percent), Singapore with 113 people (7.28 percent), and Malaysia with 36 people, Japan 95 people. South Korea 18 people, India 12 people, Philippines 44 people, Hongkong 45 people, Thailand 20 people, Australia 59 people, England 59 people, Netherlands 53 people, France 36 people and only 2 Russians (Tourism, 2019). During the Covid-19 pandemic, tourism in North Sulawesi fell badly due to various restrictions on foreign tourist visits (P.S.B.B. and P.P.K.M.) from 2020-early 2022.

After the Covid-19 pandemic, foreign tourists from Europe and the United States (U.S.) started to visit North Sulawesi (North Sulawesi) after the tightening of the Covid-19 rules was loosened. In May 2022, as many as 41 tourists from the U.S. entered Sam Ratulangi Airport, or 3.92% of the total foreign tourists coming to the North Sulawesi area (B.P.S. 2022). Meanwhile, foreign tourists from Europe, especially Germany, totaled 14 people, and France 10. Although this is still relatively small compared to before the pandemic, the data shows that foreign tourists in North Sulawesi are from Asia and outside Asian countries. Most of the foreign tourists in North Sulawesi are from China, amounting to 940 people or 89.95%.

How do professional services firms build the capabilities needed for effective international operations? Although the internationalization of manufacturing firms is a widely studied topic. However, the literature on the internationalization of service firms is scant. The problem is even more urgent when looking for professional services such as health organizations and hospitals. We carry out international market expansion studies by professional service companies. In this study, we studied internationally labeled public and private hospitals in Manado, which serve the entire province of North Sulawesi.

They were taking advantage of the strategic location of the city of Manado as one of the leading national mainstay tourist destinations. International services at these international hospitals have shown entrepreneurial initiatives that have expanded their operations beyond the domestic market over the past few years. Serving foreign tourists is a creative strategy implemented by several international hospitals in Manado. The study includes operating a full-service hospital, executing management contracts, and attracting equity capital from international investments. We argue that studies with various organizational capabilities are needed for traditional companies focusing on the domestic market to expand into the global healthcare market. We conducted an initial integrative study and offered

implications for advancing managerial knowledge and practice, especially in international-minded hospital operations.

The topic of internationalization of service organizations has been studied extensively in international business. The theoretical framework is widely adopted in the studies is the internationalization process perspective. Internationalization view as a process, journey, and innovation in hospital organizations. Researchers contributing to this stream include Cavusgil & Knight (2015). The concept of the Uppsala model refers to the staged model or the innovation in internationalization model. These scholars conceptualize corporate internationalization as a sequential and gradual process, taking place over a long time, reflecting managers' careful attitude. While the internationalization process perspective has garnered a great deal of attention in the literature, it is developed mainly by manufacturing firms rather than service firms.

While some experts argue that the internationalization process model is mostly developed from the experience of manufacturing companies, in its development, it can also be applied to service organizations, including hospitals, Pogrebnjakov & Maitland, (2011) argue that there is a difference between the internationalization of service companies and the internationalization of manufacturers because the characteristics of services differ with manufacturers. The three well-documented service characteristics are intangibility, heterogeneity, and inseparability. Intangibility indicates that a service cannot be touched, looked at, inventoried, and tested before making a decision. Services also tend to be inseparable; production cannot be separated from consumption. In other words, the production and consumption of most services coincide. Third, services are heterogeneous; it is difficult to produce services that are identical to one another. The unique characteristics of these services critically influence not only the internationalization process but also foreign market entry decisions. Finally, service credibility depends on how much it is embodied in a physical product. When services are embodied in tangible products, it becomes possible to export products, license them, or invest in foreign markets. However, if the provision of services depends on professional service providers, then company representatives must also approach consumers. Second, the extent to which the production and consumption of services can be spatially separated. According to Uner, et al (2020).

Consumption and production coincide (as in the case of medical care), so it becomes imperative for marketers to find activity in overseas patients either through contractual agreements with the supplying host country or through foreign direct investment. The exception is when the consumer travels to the service country, as in medical tourism or to foreign tourists. They proposed a "nature of service action" perspective. There are two key questions: At whom (or what) is the action of service directed? And is the service act tangible or intangible? These two questions produce a four-way classification scheme. These are person processing, possession processing, mental stimulus processing, and information processing services. The nature of processing can be either tangible (for example, a medical procedure on a patient's body) or intangible (capturing thoughts or intangible assets) (Wirtz & Lovelock, 2016).

Turning to healthcare, most of those services can be characterized as patient processing services, which involve actual actions directed at the person's body, such as heart surgery. Another thing is part of health care services, including mental stimulus processing services, consisting of intangible actions directed at people's minds, such as psychiatric patients. Thus, most health services require physical contact between patients and providers. The typical practice of seeking health services is visiting health facilities in person and liaising with a wide range of providers, from nurses to doctors. In other words, health services are high-contact and require the physical presence of both patients and providers simultaneously, usually in health facilities. On the other hand, low-contact healthcare services do not require any physical contact serving international customers in innovative ways and internalizing their growing knowledge by nurturing agile and competent managers (Uner, et al. 2020).

Medical practice and digital technology will improve the reputation for both domestic and overseas patients. Furthermore, foreign tourists (tourists) will feel more secure and confident if there are international-class hospital services that can be relied upon when visiting Manado tourist destinations. Umboh & Aryanto (2015).

Everyone can now travel to almost all parts of the world, including people in the Asian region, hence, Indonesia. Therefore, Indonesia is one of the world's tourist destinations. Through the tourism ministry, the government has established a Super Priority Area (D.S.P.), namely the Special Economic Zone (SEZ) of Likupang, North Sulawesi. The charm of Likupang's tourism has resulted in a surge in tourists in North Sulawesi. Essential sectors in supporting D.S.P. include the health sector, especially hospital readiness in the North Sulawesi and Manado regions (Waloni et al., 2018).

Hospital is a health service institution that organizes complete individual health services that provide inpatient, outpatient, and emergency services. Hospitals also aim to facilitate public access to health services. (U.U. No. 44 of 2009) concerning hospitals in Indonesia. The challenge in today's hospital world is to improve the quality of services holistically in all aspects of health, including factors that patients value, such as comfort, order, completeness of facilities, respect, and professionalism so that they can match hospital health services (Waloni et al., 2018). In the era of globalization, hospitals need to carry out marketing activities that are influenced by factors such as Information and communication technology. It brings us into the free-market era where location and distance are no longer a problem. The easier access to Information makes it easier for the public to determine which hospital the patient will seek treatment at; this causes competition between hospitals to become increasingly stringent. Rush (2019). However, the world is currently struggling to combat the spread of communicable diseases, which include emerging and re-emerging infectious diseases. Several cases of influenza and tuberculosis transmission have been reported via air travel. The data already provides strong evidence of air circulation patterns in the cabin during flight and ventilation systems. There is evidence of disease transmission, a huge health threat from travel activities. Avian influenza, MERS, Zika, swine flu, and Ebola are just a few of the illnesses that have been reported to be transmitted from passenger travel from endemic areas. We are still in the Covid-19 pandemic, where people are still struggling with strict health protocols (Prokes). Within 1-2 hours of the flight, a person can travel in countries in the Southeast Asia region, which can also transmit the disease to other passengers on the plane and the transit time at the airport until arriving at the destination (Lalenoh & Lombogia, 2017).

International hospital health services cannot be separated from the problem of trust given by service providers to their consumers (Malama & Hyder, 2012). Purpose: Malama & Hyder's (2021) research is to increase understanding of how multilevel trust is built and how multilevel trust relates to and influences international marketing strategies for health services. Design/Methodology/Approach: A comparative case study approach was applied with Elekta, a Swedish company operating in Brazil, the Philippines, China, Russia, and Hong Kong. Findings: This research culminates in a multilevel trust (MLT) model, which consists of three levels related to the individual, company performance, and context. The implications of this research offer a context-based multilevel trust model from a health-focused process perspective. Furthermore, this model can be tested in other service sectors besides hospitals. The hypotheses built in this study are as follows:

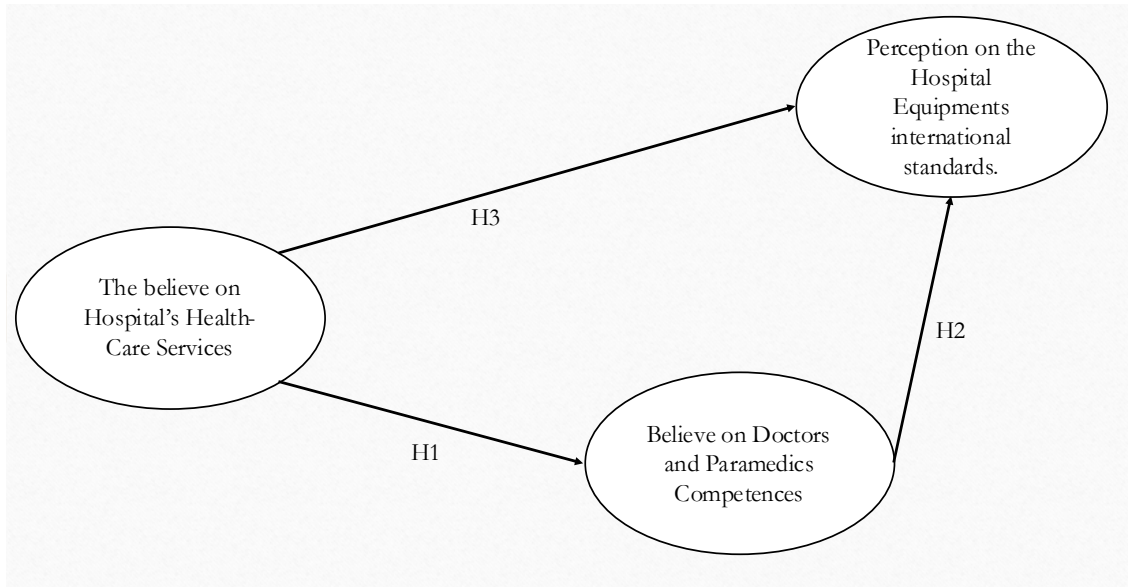


Figure 1. Empirical Research Model

H1. There is a significant and positive impact between beliefs about international hospital quality services on the competence of paramedics and doctors.

Kim & Lee (2016) examined the increase and complexity of current medical tests and surgical procedures in outpatient hospitals that require nurses to have a customer orientation focusing on different interests and needs. This research aims to identify factors related to customer orientation in nurses working in hospitals. This study used a correlational descriptive design with a cross-sectional survey design. The study settings were four public hospitals in Seoul and the metropolitan area. Data was collected from 138 nurses from public hospitals. The research variables are personal traits, emotional intelligence, internal marketing, service management, and others. Indonesia, especially B.P.J.S., the same experience in the Netherlands will also give trust to hospital patients when poor health insurance services at certain hospitals cause patients to move to other hospitals. The hypothesis used in this study is based on the findings found by the researchers above. The hypothesis proposed in this study are:

H2. There is a significant and positive impact between the competence of paramedics and doctors on the perception of international hospital medical equipment facilities.

Kemp et al (2017) stated in their research results that the impact of advertising or endorsements on social media would emotionally affect patients, especially emergency patients. Emotion-based health services will be far more effective than patient-centered health services that do not involve wholehearted positive emotional services from medical workers and their doctors. Furthermore, Gage et al. (2019), who examined low-middle income health services in 12 countries, including Indonesia, revealed that when patients' expectations of hospital health services are perceived as low, this will reduce the patient's level of trust in-home services. Hospital and low expectations will affect the credibility of the hospital concerned. Dunsch et al. (2018). Reminded that surveys of satisfaction in hospital patients must be careful of the possibility of survey bias caused by the framing of questions asked to respondents due to manipulation of questionnaire questions. The choice of questions that tend to lead to agree and disagree creates a bias in the survey, so making consumer (patient) satisfaction surveys it must be done more creatively. The proposed hypothesis can be proclaimed as follows:

H3. International hospital quality beliefs have a significant and positive influence on international tourists' perceptions of international hospital medical equipment.

METHOD

The sample of respondents was taken using a purposive non-random sampling technique using a convenient sampling method where the researcher met foreign tourists respondents who were willing to answer questions about what they perceived about the availability of international hospital services in Manado. Data collection was carried out by distributing questionnaires to foreign tourist respondents with the permission of the hotel management. Of the fifteen hotels that were permitted to ask their foreign guests to be given a questionnaire, only ten hotels allowed the number of respondents who were willing to answer 104 respondents. The following in table 1 lists 3-star, 4-star and 5-star hotels from which respondents' data were collected in Manado. This study aims to determine the perceptions and beliefs of respondents by giving a questionnaire based on perceptions of the level of confidence in international quality health services as an independent variable. The belief in medical staff and doctors being reliable, and perceptions of confidence in international quality medical equipment and medicine facilities with details as follows: Perceptions of international hospital services; Confidence in international quality healthcare; The confidence of medical personnel and doctors can be relied upon; Confidence in international quality medical equipment and medicine facilities.

Table.1 List of hotel Star 3, 4, and 5 that was the origin of respondents.

No	Hotel Name	Star
1	Aston Hotel	***
2	Grand Central Hotel	***
3	Travello Hotel	***
4	Sahid Hotel	***
5	Sahid Kawanua Hotel	***
6	Prince Boulevard Hotel	***
7	Swiss-Belhotel Maleosan	****
8	Santika Hotel	****
9	Sedona Hotel	****
10	Quality Hotel	****
11	Sutan Raja Hotel	****
12	Gran Puri Hotel	****
13	Sintesa Peninsula Hotel	*****
14	Arya Duta Hotel	*****
15	Novotel Manado Golf Resort & Convention Centre	*****

Table. 2 List of International Hospital in Manado

No	Name of Hospitals	Accreditation
1	Prof R.D. Kandou General Hospital (public)	Accredited (5 star)
2	Siloam Hospital Manado (private)	Accredited (5 star)
3	Manado Medical Center (private)	Accredited (3 star)
4.	Manado Adventist Hospital (private)	Accredited (4 star)
5.	Sentra Medika Hospital Minahasa Utara (private)	Accredited (5 star)

Source: http://akreditasi.kars.or.id/application/report/report_accredited.php, 2022

RESULT AND DISCUSSION

Table 3 below is the measurement, confirmatory factors, and reliability test for each variable and indicator. Confidence in international quality health services consists of indicators including 1. dynamic

and responsive relations, 2. good attention and impression, 3: good performance and actions, 4. Price affordability, loading factor above the acceptance level of 0 .5 and the average variance extracted (Average Variance Extracted) is also above the acceptance level of 0.5.

The competency variables of paramedics and doctors include 1. belief in moral obligation, 2. belief in effective communication, 3. belief in good patient handling, 4. belief incorrect treatment, 5. belief in professional commitment, loading factor, and the average variance extracted (Average Variance Extracted) is above the acceptance level of 0.5. Perception variables in international hospital equipment consist of indicators 1. adequate bed rate, 2. adequate average length of stay, 3. adequate bed turnover, 4. low gross death rate. These indicators have a loading factor and average variance extracted (Average Variance Extracted) above the acceptance level of 0.5.

]

Table 3. Measurement, Confirmatory Factor & Reliability

Measurement & Construct	Loading Factor	α	Reliability	AVE
International healthcare quality	.73	.82		.59
Dynamic relationship	0.86			
Attention	0.83			
Quality assurance	0.98			
Tangible Performance	0.90			
Affordability	0.82			
Doctors and Paramedics Competence	0.7	0.8		0.58
Moral obligation	0.82			
Effective communication	0.82			
Proper patients' treatment	0.81			
Proper Medical treatment	0.91			
Profession Commitment	0.84			
Perception on International Hospital's equipment	0.7	0.8		0.61
Proper Bed occupancy rate	0.81			
Proper Average length of stay	0.77			
Proper Bed turns over	0.78			
Lower Gross death rate	0.79			

Source: Primary data, 2021

Table 4 below describes the S.E.M. model. It denotes the standard path coefficient. The competence of paramedics and doctors significantly affects respondents' perceptions of international hospital equipment (H1), C.R.>0.216. In addition, H2, belief in international quality health services has a significant effect on perceptions of international hospital equipment C.R.>0.272, H3 which states that belief in international quality health services has a significant effect on the competence of paramedics and doctors C.R.>0.336. C.R. (Critical Ratio > 2) states that the hypothesis is accepted and significant (Hair, 2017).

Table. 4. Hypothesis Test

Variable		Estimate	S.E	C.R.	H
Perception on International Hospital's equipment	Doctors & Paramedics competence	0.216	0.73	3.22	H1
Perception on International Hospital's equipment	International health care quality	0.272	0.71	3.76	H2
Kompetensi paramedis & dokter	International healthcare quality	0.336	0.75	4.41	H3

Source: Primary data analysis, 2021

The results of this study, which are based on the perceptions of foreign tourists so far, have been positive about international quality healthcare services. This is in line with research by Rusli (2019) in Indonesia that respondents' perceptions of the presence of international hospitals have been positive and add to their confidence in the patients being treated. Confidence in international quality health services also received a positive response among foreign tourist respondents. However, fares are still felt to be unaffordable because this indicator has the lowest loading factor and attention, and good impression factors need to be developed even better because when the service provided is prime, it will give a good word-of-mouth effect for foreign tourists. This is also by previous research conducted by Dunsch et al. (2018).

The competence of paramedics and doctors still needs to be developed because the average loading factor is relatively low. This is due to the need for a good impression conveyed on websites or social media, which must be in an excellent international language (English). Access is also smooth when patients and observers of international hospital services strive to obtain accurate Information. Perceptions of confidence in international hospital equipment are also inadequate even though statistically, it has far exceeded the loading factor requirements exceeding 50 (Hair, 2017).

CONCLUSION AND RECOMMENDATION

This study concludes that as one of the main tourist destinations in Indonesia, it is imperative to prepare health service facilities for foreign tourists visiting Manado and North Sulawesi. Infrastructure facilities are not only hotels, restaurants, roads, and physical facilities for tourist destinations. However, it is also vital to build and prepare health services for foreign tourists, including the competence of paramedics and doctors, for example, in mastering foreign languages (English, Mandarin, etc.). It is also vital to prepare internationally qualified hospital equipment; so far, the perception of tourists tends to be positive towards international hospital services in the capital city of North Sulawesi, Manado.

The limitation of this study is that the health services provided by hospitals in Manado are based on foreign tourists' perceptions, so the respondents have not experienced them as users or as patients at hospitals in Manado. Therefore, the following research agenda needs to be based on international tourist patients who have been treated at an international hospital in Manado.

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Selection of a Sustainable Strategy Using DSS for Students in Selecting the Faculty of Economics and Business with the Topsis Method

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Abstract

Universities must be able to predict opportunities and challenges with the right interest in the student's choosing majors in higher education in the digitalization era. This study provides the right strategy for FEB UDINUS by proposing a structural hierarchical model to analyze changes in student decision-making patterns in choosing the Faculty of Economics and Business at Dian Nuswantoro University in the digital market era by taking the context of sustainable value. The data collection techniques used in-depth interviews to determine student's decision-making criteria in choosing FEB majors. The analysis of decision-making factors was processed using TOPSIS (Technique for Order Preference by Similarity to Ideal Solution). The results of this study show the ranking strategy of the most appropriate ranking such as the strategy to find credible partner, the strategy to provide additional community benefits, the strategy to educate the community, the strategy for building collaboration between students, the strategy for creating iconic brands, the strategy for building collaboration between faculty and students, the strategy for building new learning models, and the strategy for building a new learning culture.

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INTRODUCTION

The world of education today is increasingly competitive and is required to produce graduates who are competent and superior and have added value, so they can compete in the world of work. Education becomes absolute requirement and a means to develop students' knowledge and skills. To get the desired output, education must be supported with adequate facilities adapted to the digital era.

The Faculty of Economics and Business (FEB), Dian Nuswantoro University has two study programs of accounting and management and has the post-graduate programs of Master in Management and Doctoral in Management. FEB Dian Nuswantoro University is a faculty that has the second largest interest after the faculty of informatics engineering. The two study programs have produced many of the best graduates who work in government and private institutions. Facing the digitalization era, the faculty of economics continues to flap its wings to face competition by improving the quality of education as seen from the superior accreditation of each study program. Superior accreditation is a selling point so that students have an interest in choosing a study program to study. Students in choosing a study program at FEB UDINUS have different considerations because each student has different perceptions, aspirations, interests, views and talents in analyzing the quality of study programs. The importance of maintaining and improving the quality of study programs in the midst of competition in the world of education is very important for FEB to explore the factors that form the basis for considering students' interest in choosing majors in accounting and management. UDINUS's faculty of economics and business are required to be able to understand consumer behavior, the students in this case, in choosing higher education services.

Universities must have the right strategy that is superior to competing universities. Various methods were carried out, such as placing billboards in strategic places, banners, promotions, and mobilizing the closest people to join FEB UDINUS. The factors that influence consumer behavior are internal factors (personal and psychological factors) and external factors (cultural and social factors)

External factors have a very extreme impact on student interest in choosing majors. Digitalization is changing faster than ever before. and the Internet is becoming a core business need in this era of electronic generation (Abbasi et al., 2011; Fullam, 2017; Tan et al., 2010). Digital platforms are used by marketers to identify their opportunities which assist them in promoting, communicating, and distributing their products to end users (Confos et al., 2016; Shaouf et al., 2017). This gave rise to the exponential growth of the volume of Internet-based purchases simultaneously changing consumer decision-making patterns. Consumers rely on the Internet for their daily needs and even adapt their needs with the help of digital technology (Royle and Laing, 2014). Digitalization changes the mindset of students choosing accounting and management majors to focus more on digital-based curricula. Advances in technology, changes in consumer behavior with their busy schedules, and trust in the e-commerce environment are the driving factors for changes in consumer decision-making patterns (Srinivasan et al., 2016; Wu et al. 2016). This pattern of changing consumer behavior poses a significant challenge for universities to provide services with digital-based accounting and management majors. Furthermore, product ratings and reviews also influence purchasing decisions and consumer shopping behavior (Filiari, 2015; Zhu and Zhang, 2010). In this case, the review of superior accreditation accompanied by the good quality of education and the large number of graduate students majoring in accounting and management who are accepted to work in government agencies and large companies are the factors that attract students' interest in choosing the FEB major.

The pattern of consumer decision-making changes rapidly due to the ease of information being transmitted through online facilities, and, therefore, universities must have a unique way of marketing in formulating strategies in order to have consumer appeal, loyalty and retention. Therefore, in the digital market era, synthesizing information about changing patterns of consumer (student) behavior in choosing economics majors is very important for determining the right tertiary strategy. Therefore, the results of this study help FEB UDINUS to understand and discover the factors that influence the changing pattern of consumers (students) choosing majors in accounting and management. To overcome the

problem of digital market evaluation which includes many qualitative factors as measured by unclear data, this research uses the Topsis approach. The Topsis method assists in the analysis of decision-making factors which calculates the priority weight of the final factors to get the best ranking and proposes a structural hierarchical model of the factors. (Primasari, Wardoyo, Sari, 2018). Structural hierarchical model of factors to predict patterns of changes in consumer decision-making based on sustainable activities. Sustainable value is a sustainable activity that integrates economic, environmental and social values.

Sustainable activities refer to sustainable values that integrate economic, environmental and social values. Economic, social, and environmental dimensions provide a more focused perspective on sustainable value (Evans et al, 2017). Social values relate to aspects of equality and diversity, poverty alleviation, welfare, community development, social behavior, secure livelihoods, labor safety standards, and health. Environmental values can be in the form of energy-efficient consumption, renewable resources, low emissions, waste reduction, biodiversity, and pollution prevention. The economic values are in the form of aspects of profit, rate of return on investment, financial security, long-term viability, and business stability.

There are nine sustainable strategies according to John Grant (2009), i.e. (1) Providing product samples to the community, (2) Looking for credible partners, (3) Finding additional benefits, (4) Educating the community, (5) Building iconic brands, (6) Collaborate with consumers and change their behavior, (7) Building a new culture, (8) Building a new mode, (9) Building collaboration between consumers. This research tried to find out the best strategy out of nine sustainable strategies based on the main factors in student decision making to enter FEB.

Universities need to take into account the factors that influence students choosing study programs at the faculties of economics and business, including internal and external factors. Consumer behavior is influenced by personal, psychological and cultural, social factors (Kotler and Armstrong, 2012). The factors that influence student interest are psychological, personal, social and cultural factors. In the context of consumer behavior, culture is described as values and beliefs, customs that apply in society to regulate consumer behavior. In certain layers of society, the culture of the need for increased knowledge and new experiences that students want has the most extensive influence on students' decisions to choose majors in accounting and management. From social factors, it is explained that the interest of consumers (students) in choosing certain majors is influenced by family, reference groups, roles and status. The results of previous research state that the factors that influence students' interest in majoring in accounting at STIE Perbanas are employment, interest and image factors (Risnawati and Irwandi, 2015). The factors influencing students to choose a study program are career expectations, perceptions, and personal characteristics (Tang and Seng, 2017).

METHOD

The objects of this research were the students of management accounting and accounting in 2021/2022 at the Faculty of Economics and Business, Dian Nuswantoro University. The sampling used purposive sampling with the criteria of (1) the UDINUS FEB undergraduate students; (2) the undergraduate students who chose accounting and management majors for the 2021/2022 batch; (3) the Undergraduate FEB students who used information and tools related to digitalization in majoring in accounting and management. Data collection begins with observation and then continues with in-depth interviews to analyze in more depth the exploratory factors that influence FEB students to choose their majors. After that, it was to determine the criteria for the main factors of decision making by considering sustainable activities. Then, it was the use the Topsis method to find the best ranking alternative weights from the factors of student decision making in choosing a major.

The analysis was carried out using the method of TOPSIS. The analysis of decision-making factors was processed using TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) to get a ranking of each alternative (Primasari, Wardoyo, Sari, 2018). The stages in the TOPSIS algorithm were; (1)

creating a normalized decision matrix, (2) creating a weighted normalized decision matrix, (3) determining the positive ideal solution matrix and negative ideal solution matrix, (4) determining the distance between the values of each alternative and the positive ideal solution matrix and the solution matrix negative ideal, (5) determining the preference value for each alternative. TOPSIS requires a performance rating for each alternative A_i on each criterion C_j normalized, that is

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^m x_{ij}^2}} \quad (1)$$

Where:

$i = 1,2,3,\dots,m$ and $j = 1,2,3,\dots,m$

X_{ij} = basic matrix to be normalized,

Each i shows the row of the matrix, and every j shows the column of each matrix.

The positive ideal solution A^+ and the negative ideal solution A^- can be determined based on the weight rating.

$$y_{ij} = W_i r_{ij} \quad (2)$$

$$A^+ = (y_1^+, y_2^+, \dots, y_n^+);$$

$$A^- = (y_1^-, y_2^-, \dots, y_n^-);$$

With Criteria

$$y_j^+ = \begin{cases} \max y_{ij} ; \\ \min y_{ij} ; \end{cases}$$

$$y_j^- = \begin{cases} \max y_{ij} ; \\ \min y_{ij} ; \end{cases}$$

Where

Y_{ij} = weighted ranking matrix

W_i = weight of i -th rank, and r_{ij} is the normalized matrix.

$i = 1,2,\dots,m$ dan $j = 1,2,\dots,m$

The distance between the alternative A_i and the positive ideal solution is formulated as

$$D_i^+ = \sqrt{\sum_{j=1}^n (y_i^+ - y_{ij})^2} \quad (3)$$

The distance between the alternative A_i and the negative ideal solution is formulated as

$$D_i^- = \sqrt{\sum_{j=1}^n (y_i^- - y_{ij})^2} \quad (4)$$

The preference value for each alternative (V_i) is given as

$$V_i = (D_i^-) / (D_i^- + D_i^+) \quad (5)$$

RESULT AND DISCUSSION

This study used a questionnaire survey to collect data. The questionnaires used 25 questions to assess decision making in choosing the Udinus Faculty of Economics and Business (FEB) as a place of study. The list of questions was based on references from Kumar's research (2018). The factor analysis reduced the data to identify factors that explained most of the observed variance of the variables. Before carrying out a factor analysis, it is necessary to carry out tests to meet the general criteria.

The results of the KMO and Barlett tests in Table 1 show that the data of this study fulfilled its adequacy score (0.9), and the Barlett Test tested the correlation of each item which was stated to be significant with 0.00. In Table 2 Communalities can be seen that most of the communality values are more than 0.50 which means that most of the variables can explain the factors. In the Initial Eigenvalues Table (Table 3), there are 5 components that have Eigenvalues of more than 1, so there are 5 new factors formed from the 25 variables analyzed. Factor 1 33.838% variation. Factor 2 is able to explain 41.029% of the variation. Factor 3 was able to explain 46.753% of the variation, Factor 4 was able to explain 51.586% of the variation and Factor 5 was able to explain 56.094% of the variation. So of the five factors formed, it is able to explain 45,456% of the variation, as shown in Tables 3 and 4.

Table 1. KMO dan Barlett’s Test

KMO Measure of Sampling Adequacy		.902
Barlett’s Test of Sphericity	Approx. Chi-Square	1803.315
	df	300
	Sig.	.000

Table 2. Communalities

	Initial	Extraction
X1 – Advanced in digital and information technology	1.000	.542
X2 – Have excellent study programs	1.000	.628
X3 – Hope for a good future	1.000	.625
X4 – Full fill educational needs	1.000	.446
X5 – Known as the modern faculty	1.000	.574
X6 – Has good facilities	1.000	.441
X7 – Known as an innovative faculty	1.000	.511
X8 – Seeing the success of the alumni	1.000	.561
X9 – Known as a high quality campus	1.000	.577
X10 – Favorite campus	1.000	.547
X11 – Know the faculty for a long time	1.000	.519
X12 – Information is easy to obtain	1.000	.630
X13 – Location saves transportation	1.000	.475
X14 – Smooth registration without any problems	1.000	.587
X15 – Good reputation	1.000	.687
X16 – Famed faculty	1.000	.547
X17 – Have more confidence	1.000	.638
X18 – Competent teacher	1.000	.520
X19 – Weighing competitors' offerings	1.000	.443
X20 – There is technopreneurship	1.000	.549
X21 – Affordable cost	1.000	.709
X22 – Unaffected by other competitors	1.000	.723
X23 – Friend referrals	1.000	.530
X24 – Gives a good influence to society	1.000	.563
X25 – High confidence	1.000	.452

Table 3. Total Variance Explained by Extraction Sums of Square Loadings

Factor	Extraction Sums of Square Loadings			
	Initial Eigenvalues Cumulative %	Total	% of Variance	Cumulative %
1	33.838	7.930	31.720	31.720
2	41.029	1.211	4.843	36.563
3	46.753	.784	3.138	39.701
4	51.586	.837	3.349	43.050
5	56.094	.602	2.406	45.456

Extraction Method: Principal Component Analysis

Table 4. Total Variance Explained by Rotation Sums of Squared Loadings

Faktor	Rotation sums of square loading		
	Total	% of Variance	Cumulative %
1	3.915	15.661	15.661
2	2.893	11.572	27.233
3	1.714	6.857	34.091
4	1.682	6.726	40.817
5	1.160	4.639	45.456

Extraction Method: Principal Component Analysis

Table 5. Rotated Factor Matrix

	Factor				
	1	2	3	4	5
X2	.670				
X3	.631				
X5	.600				
X1	.589				
X9	.525				
X8	.525				
X7	.514				
X4	.476				
X10	.436				
X6					
X25					
X15		.723			
X17		.618			
X16		.584			
X24		.500			
X14		.464	.429		
X18	.429	.431			
X12			.768		
X11					
X13					
X22				.761	
X21				.709	
X23					.465
X19					
X20					

Table 5 shows that the factors formed from 25 indicators are a total of 5 factors. Loading factor > 0.4 is stated to be valid because the number of samples is up to 200 (Hair et al., 2010) so that it increasingly plays a role in the factors to be measured. Furthermore, the factors formed from these groupings are named with the names of the new factors. These five factors are described. These variables tend to lead to the advantages possessed by the faculty and their competencies. Keywords that are dominant in this group are advanced technology, superior, future, contemporary, innovative, quality, favorite, and competent resources of FEB Udinus. Therefore, Factor 1 is named the Factor of Excellence and Competence. The formation of groups in Factor 2 has dominant keywords in reputation, good name, well-known, trust, smoothness of registration, influence on society to FEB Udinus, so this 2nd factor is named Reputation Factor. The dominant keywords are information and fluency in the registration process for new FEB Udinus students, so this 3rd factor is named the Ease of Information Factor. Prospective new students consider the cost factor and other campuses before entering FEB Udinus. Prospective students will seek information about FEB Udinus' competitor campuses so that they have other choices or alternatives. So, this is a factor that forms the group in Factor 4. which can be named the Cost Factor. The factor groups contain indicators of peer influence as a reference. The influence of friends is the main reference in the formation of this group of factors, hence the name Reference Factors.

The results of the exploratory factor analysis are used as criterion data, while the alternative data used is a sustainable strategy that refers to John Grant's (2009) adjusted research, namely (1) Providing examples of superior products to the community, (2) seeking credible partners, (3) provide additional benefits to the community, (4) educate the public, (5) create iconic brands, (6) build a new learning culture, (7) build new learning models, (8) build collaborations between faculties with students, (9) build collaboration between students. This criterion data and alternative data will be calculated using the TOPSIS method to determine the most suitable strategy used by FEB Udinus, taking into account excellence, reputation, ease of information, costs, and references.

The opinion of several experts is needed here to give the criterion weight to the criterion data. Experts enter a score between 1 and 7 with 7 as Very Important. The preference weight for each criterion

can be seen in Table 6, alternative values for the criteria are obtained from the scores filled in by experts. Next, determine the Normalized Decision Matrix.

Table 6. Alternative Value

Alternatif	Criteria				
	C1	C2	C3	C4	C5
A1	6	6	5	6	5
A2	7	6	5	5	6
A3	6	6	5	5	6
A4	6	6	5	5	6
A5	6	6	5	5	5
A6	5	5	5	4	5
A7	6	6	4	4	5
A8	6	5	5	4	5
A9	6	6	5	5	6

The value of each criterion and alternative was added up and then the value of each criterion was divided by the total number of criteria to get the results of the Normalized Decision Matrix as follows:

$$N = \begin{bmatrix} 0,3323 & 0,3453 & 0,3402 & 0,4150 & 0,3049 \\ 0,3877 & 0,3453 & 0,3402 & 0,3459 & 0,3658 \\ 0,3323 & 0,3453 & 0,3402 & 0,3459 & 0,3658 \\ 0,3323 & 0,3453 & 0,3402 & 0,3459 & 0,3658 \\ 0,3323 & 0,3453 & 0,3402 & 0,3459 & 0,3049 \\ 0,2769 & 0,2877 & 0,3402 & 0,2767 & 0,3049 \\ 0,3323 & 0,3453 & 0,2722 & 0,2767 & 0,3049 \\ 0,3323 & 0,2877 & 0,3402 & 0,2767 & 0,3049 \\ 0,3323 & 0,3453 & 0,3402 & 0,3459 & 0,3658 \end{bmatrix}$$

Furthermore, the result of multiplying the R matrix with the preference weight show the results as follows:

$$W = \begin{bmatrix} 1,6615 & 1,3810 & 1,3608 & 1,2451 & 0,9146 \\ 1,9385 & 1,3810 & 1,3608 & 1,0376 & 1,0975 \\ 1,6615 & 1,3810 & 1,3608 & 1,0376 & 1,0975 \\ 1,6615 & 1,3810 & 1,3608 & 1,0376 & 1,0975 \\ 1,6615 & 1,3810 & 1,3608 & 1,0376 & 0,9146 \\ 1,3846 & 1,1509 & 1,3608 & 0,8301 & 0,9146 \\ 1,6615 & 1,3810 & 1,0887 & 0,8301 & 0,9146 \\ 1,6615 & 1,1509 & 1,3608 & 0,8301 & 0,9146 \\ 1,6615 & 1,3810 & 1,3608 & 1,0376 & 1,0975 \end{bmatrix}$$

And the final step was to determine the Alternative Relative Closeness Value to the Ideal Solution, the results of which are shown in strategy in Figure 2. Then these values are ranked to get the greatest value as the most appropriate decision alternative. From Figure 2, after being ranked and sorted from the largest value, the most appropriate strategy is looking for a credible partner which has the greatest value.

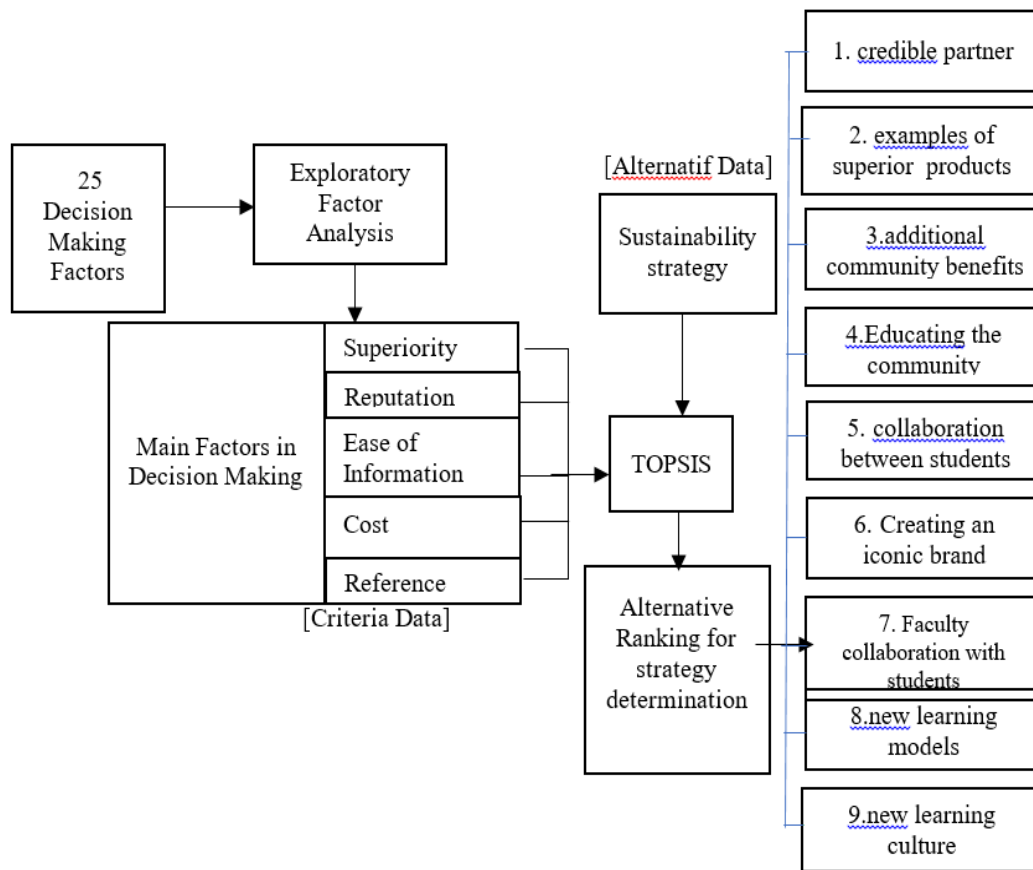


Figure 2. The FEB UDINUS Sustainability Strategy DSS process model

From Figure 2, it can be seen that the strategy that can be taken by FEB Dian Nuswantoro University which is in the highest ranking is Seeking a Credible Partner, meaning that in operational activities FEB UDINUS must hold cooperation partners, namely competent institutions for curriculum development and innovation and application of graduates in the world effort and professionalism. A credible partner can be in the form of collaborating with practitioners in the world of work to fill in the FEB Udinus curriculum, it can also be student internships in the world of work practice, it can also be collaboration with certification bodies to form students ready to practice professionalism with knowledge, it can also be brainstorming collaborations with universities Overseas by increasing student mobility, international webinars, exchange lectures and research collaborations. The second strategy was to give examples of superior products to the community, for example the excellence of UDINUS in Informatics Engineering. Therefore, the students were taught the courses that synergized with Information Technology, for example in accounting there is digital-based Forensic Audit, technopreneur and digital-based marketing for courses in Management.

The third strategy was to provide additional benefits to the community namely reseaching natural dyed batik, making products that are environmentally friendly with the benefit of avoiding harmful chemicals. Go green category products: (1) energy saving, (2) can be recycled, (3) using recycled components (4) do not use hazardous chemicals. And then building the Wisesa Dinkop UMKM application as e-commers for natural color batik products where this application is a place for selling environmentally friendly batik. Also building a special simple bookkeeping application that suits the needs of MSMEs

The fourth strategy was educating the communit. The results of the implications of research and grants from FEB UDINUS lecturers are educating batik artisans to use natural dyed batik. Educating the public through digital or fintech. Another example is introducing low cholesterol foodstuffs that support

a healthy lifestyle. The fifth strategy was to build collaboration between students. UPT Entrepreneurship, the P2MW event entrepreneurship team makes products involving cross-faculties in making products that are popular with the community and are trending, fintech, digital products and commercial products that sell well in the community besides services. For example, making donuts from gadung (tubers) with the advantage of being low in cholesterol, because there was collaboration with the faculty of health. There was research collaboration between students and across universities.

The sixth strategy was creating the Ekonik brand, for example building an iconic brand that has an environmentally friendly theme, empowering food that supports a healthy lifestyle with the Segudang Gadung Donuts brand. The seventh strategy was to build collaboration between faculty and students in the forms of writing joint journal articles between lecturers and students, community service, grants, and seminar committees. The eighth strategy was to build new learning models, for example using a long-distance hybrid learning system with foreign countries and between universities, and Field work practices that provide education in the world of work according to the field they have, E billing, E-government, E-tax. The ninth strategy was to build a new learning culture. For example, hybrid learning was cultivated in every subject. The capital market course was continued with online stock market practice. In entrepreneurship courses, it was by making real businesses, for example, making a segudang gadung outlets.

CONCLUSION AND RECOMMENDATION

After being ranked and sorted from the largest value, the most important strategy occupies the largest order, that is, the most suitable strategy is to find a credible partner who has the greatest value. It is time for FEB UDINUS to become a university that always excels in flapping its wings in partnership with the business world, practitioners from the world of work and certification bodies, as well as collaboration with institutions related to SOEs and private companies and also collaboration with foreign companies and universities. Therefore, it creates a superior academic climate, ready for the world of work and ready to compete in the international world.

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Behavioral Financial Aspects Analysis on MSMEs Business Development of Culinary Sector in Semarang City

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Abstract

This study was proposed to study and analyze behavioral financial technologies for the development of MSMEs in the culinary field in the city of Semarang. There has been a lot of research related to fintech (fintech) or fintech topics or issues, but not much research has been found on behavioral fintech, especially related to MSME business development. The sample of the study is 125 culinary MSMEs in the city of Semarang. The data collected through the questionnaires was then analyzed using smartpls. This study found that financial satisfaction, owner characteristics, social impact, and risk reduction had a positive (significant) impact on behavioral finance, while financial literacy had a significant negative impact on behavioral finance. Behavioral financial factors have a significant positive impact on MSME business development. This means that Behavioral Finance as a mediation variable between Financial Satisfaction, Owner Characteristics, Financial Literacy, Risk Mitigation, Social Influence variables affecting on business development. Many of them (MSMEs) claimed that they have no experience of using digital technologies themselves, in this case, online transaction applications, and they still did not understand financial literacy. Future research on other variables that do have a positive and significant impact on MSME business development. The sample size also needs to be increased in size and diversity of the MSME sector by at least 60-70% in order for the study to better describe the situation and the state of the MSME.

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INTRODUCTION

Trends in the use of financial technologies (fintech) is reflected by its growth in the number of mobile phone and Internet users increasing by 8% per year and is estimated to affect 113.48 million people in 2022 (Bank of Indonesia, 2022). The growth of this trend is inseparable from the expansion of communication networks and the development of information technologies, namely financial technologies, which managed to influence the way of life (Syah & Karen, 2022). The development of financial technologies has an impact on new innovations in electronic payments (Aksami & Jember, 2019). Advances in financial technology have allowed the gradual transformation of cash into non-cash forms of payment that are simpler, more efficient, efficient and secure as a means of payment (Liliani, 2020).

The change in consumer preferences in financial transactions has been evidenced by the behavioral intention to use fintech (Abdullah et al., 2018). Consumers pay attention to the speed, convenience, low cost, and ease of maintenance of transactional systems. Their fintech financial transactions include payments, investments, borrowing money, and transfers (Rahmawati et al., 2018). This shows that consumer perceptions have a significant positive impact on the intention to use fintech (Sijabat et al., 2019). Research's Armilia & Isbanah (2019) showed that financial behavior has a significant positive impact on financial satisfaction within fintech. This is reinforced by the benefits effect of using fintech, and perceptions of trust have a significant positive effect on the intention to use fintech payments (Purwantini & Amalia, 2021).

This shift preferences can be seen in the use of payment applications used by MSMEs to receive payments from their customers, namely OVO, Gopay, Grabpay and payment applications provided by e-commerce partners such as shoppee, Bukalapak, Lazada, and others (Affan & Widyastuti, 2022; Lestara et al., 2021). In fact, the cash payment system still dominates the MSME payment process, accounting for 63% (Hasan, 2020). Financial opportunities, convenience and security of users are very supportive of the system of using financial technologies or shortly it is called fintech (Kamil, 2020). Fintech played an important role in economic transactions in the midst of a pandemic. Fintech continues to undergo significant improvements and developments. The role of fintech in helping MSMEs is to increase access to financial services, sources of finance, and enhance financial literacy for MSMEs (Putri & Christiana, 2021).

Micro business entities do not fully understand the use of Fintech Payment, this is due to the lack of digital literacy. Micro enterprises have sufficient skills because they can explain the costs incurred and use functions in it, one of which is sales accounting (Yuliarisa et al., 2022). Promotional and prevention-oriented behavior influences fintech risk mitigation actions and influences the willingness of MSMEs to use fintech (Affan & Widyastuti, 2022). Unmet needs of MSMEs, namely changes in human behavior and the intensity of the use of financial technologies (fintech) in society (Purnamasari et al., 2020).

Perwitasari, (2022) found that MSMEs were generally willing to embrace fintech for reasons including perceived utility and perceived ease of use in helping to accelerate the delivery of services to consumers through fintech. Use of MSME financial technologies such as peer-to-peer lending, risk and investment management, market aggregators and payment gateways, in order to manage MSME financial performance (Rahadjeng et al., 2021).

The financial technology used represents the dynamics of the financial management behavior of individuals and/or MSMEs. They are required to make financial decisions based on financial attitudes, and this is where the person focuses on the money they have and their plans for the future (Zikrillah et al., 2021). Fintech, based on payment gateways and digital marketing, has a significant positive impact on the financial performance of MSMEs (Adella & Rio, 2021). The Covid-19 pandemic was a situation of increasing behavior of MSMEs using fintech (Wiyono & Kirana, 2021). Fintech, one of the implementations of digitalization, is used by MSMEs. The fintech context is the interaction between users and applications that has a significant positive impact on fintech usage intentions (Wismantoro & Susilowati, 2021).

The target of this research outcome and its contribution to the science associated with MSMEs using fintech will include variables of the cognitive and emotional elements of fintech that are related to the development of MSME business in the culinary field. FinTech is rapidly growing and becoming the new financial alternative for micro, small and medium enterprises (MSMEs) that form the backbone of the national economy (Majid, 2021). The study is to ascertain the extent to which Financial Satisfaction, Owner Characteristics, Financial Literacy, Risk Mitigation, Social Influences, impact on MSMEs Business Development through mediating role of Behavioral financial.

This research was to determine and analyze the influence of financial satisfaction, owner characteristics, financial literacy, risk mitigation, and social influences through behavioral financial mediation on MSME business development. The analysis applied the Structural Equation Model (SEM) accordingly to aim this research. The research model proposed in this study as seen in figure 1.

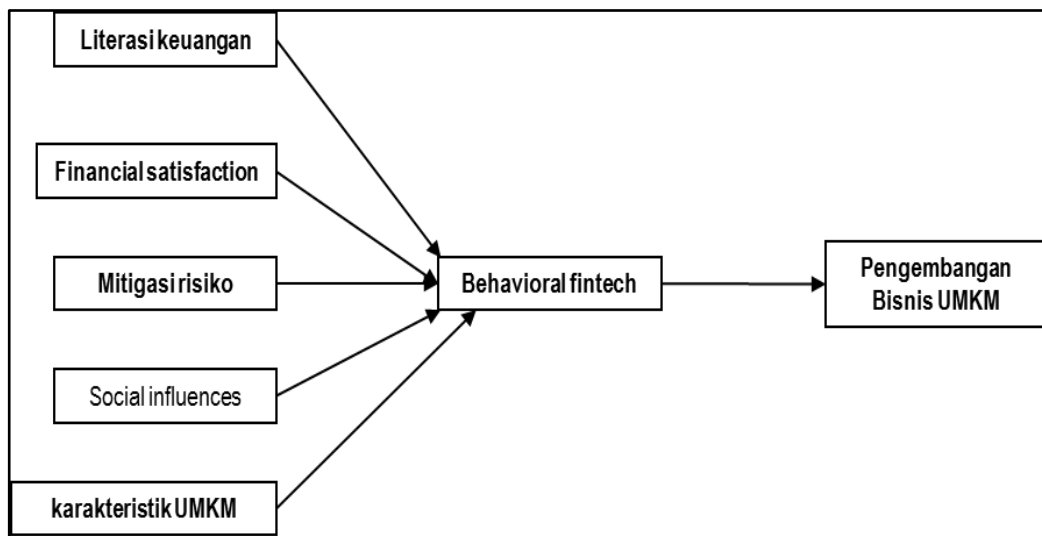


Figure 1 Behavioral Fintech research model for MSME Business Development

The hypotheses are as follows

1. Behavioral fintech has a positive impact on MSME business development.
2. Financial satisfaction has a positive impact on behavioral fintech
3. The characteristics of MSMEs have an impact on behavioral fintech.
4. Financial literacy will have an impact on behavioral fintech.
5. Risk mitigation has the potential to have a positive impact on behavioral fintech.
6. Social influences have a positive impact with behavioral fintech

METHOD

The data of this research were taken through a questionnaire to related parties, the population of the culinary sector UMKM in the city of Semarang was 1585 (Department of Cooperatives and SMEs of Semarang City, 2022). Sampling technique approached with a quota of 125 respondents, adjusted to the ability, budget, time, and energy. Sampling used the proportionate random sampling method in order for each sub-district to be represented as a respondent, to achieve this research close to reality. The research variables studied were Behavioral Financial, Financial Satisfaction, Owner Characteristics, Financial Literacy, Risk Mitigation, Social Influences, and Business Development. The notion applied to this study as follows

Table 1. Variables and Research Indicators

Variable	Definition	Indicator
Behavioral Financial	Behavioral approaches from simple to complex, both individually and in groups, are related to ways of thinking and belief in Fintech.	Trust, Information accuracy, Transaction speed Life satisfaction, Positive affect, and Negative affect
Financial Satisfaction	The level of satisfaction felt by a person regarding various aspects of his financial situation	Ability to manage finances, Current financial situation, Saving for urgent needs, Trying to save, Solve financial problems allocate funds for the future.
Owner Characteristics	The characteristics of business actors are special characteristics inherent in business actors, while business actors themselves are any person or business entity, whether in the form of a legal entity or not a legal entity established and domiciled or conducting business activities within the jurisdiction of the Republic of Indonesia.	Experience using digital technology (iPad, android), Government recommendation Education, and Company Size
Financial Literacy	a person's knowledge of finance, namely analyze and apply it in daily life to make financial decisions	Planning, Budgeting, Financial Management, Control, Search for Financial Sources Financial Storage
Risk Mitigation	A way to minimize the potential negative impact of threats on business	No risk mitigation, mobile banking, COD
Social Influences	Social environment such as family, friends, or relatives significantly influence to adopt something.	Family, Friends of the same age, Friendship, and Celebrity
Business Development	Improved business performance than before through increased sales volume, marketing reach, longer business survival and so on	sales volume, Marketing coverage Business Length

RESULT AND DISCUSSION

Test the reliability and validity of the indicators of each variable are presented in the following table. Construct reliability was measured by Composite Reliability and Cronbach Alpha. A construct was said to be reliable if it has Composite Reliability and Cronbach Alpha values above 0.70. Average Variance Extracted (AVE) values above 0.50 (Ghozali, 2021). The data construct reliability and validity in the table below showed the coefficients have met the reliability construct requirements.

Table 2. Construct Reliability and Validity

Constructs	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Behavioral Financial	0,928	0,931	0,944	0,737
Financial Satisfaction	0,948	0,951	0,959	0,795
Owner Characteristics		1,000		
Financial Literacy	0,900	0,910	0,923	0,668
Risk Mitigation	0,864	0,868	0,917	0,786
Social Influences		1,000		
Business Development		1,000		

Table 3 Discriminant validity with the AVE value (bold letters) greater than the cross-correlation construct, then the construct was declared valid, because efforts to build correlations with other parties appeared stronger than the capacity of the construct concerned (Budhiasa, 2016). Its validity based on the Fornell-Larcker Criterion is:

Table 3. Discriminant Validity

Constructs	BF	FS	OC	FL	RM	BD
BF	0,86					
FS	0,715	0,89				
OC	0,713	0,717				
FL	0,567	0,64	0,8	0,82		
RM	0,696	0,754	0,766	0,683	0,89	
BD	0,548	0,42	0,384	0,48	0,414	
SI	0,769	0,734	0,764	0,652	0,82	0,437

Tabel 4. R Square

Constructs	R Square	R Square Adjusted
BF	0,660	0,646
BD	0,300	0,294

Information from table above, showed that all independent variables, Financial Satisfaction, Owner Characteristics, Financial Literacy, Risk Mitigation, Social Influences, that was mediated by Behavioral Financial, would be capable to explain any changes of dependent variable Business Development about 66% (R Square), and the rest would be explained by other variables which are not involved in this study. In the point of view of sample size, this study has enough samples taken from SMEs population in Semarang city that indicated by R Square Adjusted 64.6%, meaning the sample was representative of the SMEs culinary sector population.

If the independent variables were directly influenced by the dependent variable, they may have capability about 30% to explain the business development variable changes, and the other was explained by the other variables that were not in this research. R square adjusted informed only 29.4% of the population was represented for the study. In sum, the mediation variable, that is Behavioral financial, has capability as a bridge for the independent variables to influence the SMEs business development.

Significance Test

Table 5. Behavioral financial has positive significantly impacted on SMEs business development. It was supported by variables of financial satisfaction, owner characteristics, and social influences that positive significantly impacted on behavioral financial respectively, its P Values was less than 0.05.

Enlightening these variables, behavioral financial of SMEs would be cultivated, since they could have business information accurately, government support (online transaction systems), and other positive responses. Nevertheless, financial literacy has negative insignificantly on behavioral financial, as shown by its P Value was more than 0.05, as well as the risk mitigation variable affected positively insignificantly, its P Value was more than 0.05 on behavioral financial variable.

For Example, making budgeting training or working capital assistances as an effort to improve SMEs financial literacy, they would not straight away to make better their behavioral financial (trust, positive effects, life satisfaction). They (SMEs) are sometimes necessary to adopt the training or any assistance then apply them in their business. Risk mitigation, such as COD (cash on delivery) or mobile banking, could be an aid to make better their behavioral financial when the bank facilitated internet banking for SMEs transaction would not missing.

Table 5 Path Coefficients

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
BF->BD	0,548	0,556	0,072	7,653	0,000
FS->BF	0,268	0,264	0,153	1,758	0,040
OC->BF	0,275	0,290	0,163	1,691	0,046
FL->BF	-0,106	-0,091	0,096	1,103	0,135
RM->BF	0,005	0,015	0,127	0,036	0,486
SI->BF	0,427	0,401	0,134	3,199	0,001

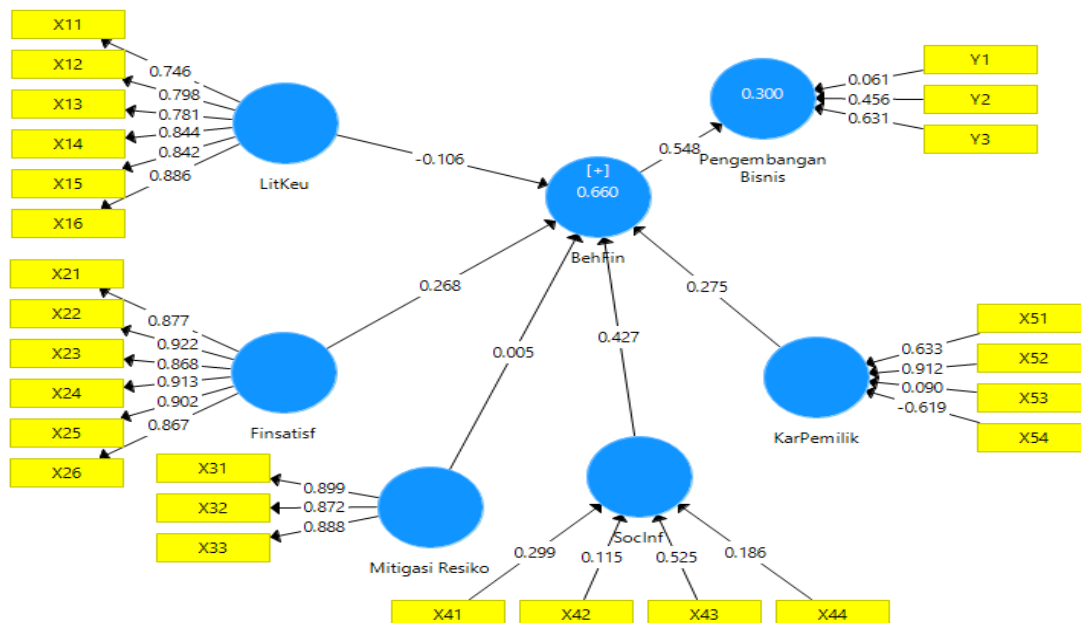


Figure 2. Structure Model (Path Coefficients Diagram)

Specific indirect effects, Table 6, informed the behavioral financial mediation of the independent variable on business development variable as dependent variable, the effect was explained by noting the P-Values in the table 6. The behavioral financial mediation, as shown its P-Values was less than 0.05, positive significantly of financial satisfaction, owner characteristics, and social influences on the business development variable.

Financial literacy variable affected negatively insignificantly on behavioral financial as P-Values was more than 0.05. When the financial literacy of SMEs would be improved, their behavioral financial might be not positively responded to or might decline to response. Risk mitigation variable, as well, impacted positive insignificantly on behavioral financial variable. This meant improving risk mitigation behavior would raise behavioral financial cognitively and or affirmatively. If risk mitigation would make use of their or make their business more profitable, they would do behavioral finance on the up and up, in terms of trust, doing online transactions, life satisfaction.

Table 6 Specific Indirect Effects

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
FS->BF->BD	0,147	0,148	0,088	1,663	0,048
OC->BF->BD	0,151	0,161	0,093	1,627	0,050
FL->BF->BD	-0,058	-0,050	0,054	1,073	0,142
RM->BF->BD	0,002	0,007	0,070	0,035	0,486
SI->BF->BD	0,234	0,223	0,080	2,939	0,002

As mentioned in Table 5 above, payment applications commonly used by MSMEs to receive payments from their customers are OVO, Gopay, Grabpay, and payment applications provided by e-commerce partners such as Shopee, Bukalapak and others (Hasan, 2020). The use of these applications due to people have changed their preferences in transactions (Rahmawati et al., 2018). The MSMEs business development could be in the form of sales volume, business marketing coverage, it was more sustainable. The transaction online technology supported to do so (Wismantoro & Susilowati, 2021). The findings of this study confirmed the research by Hassan and Rahmawati et al., which found that behavioral fintech has a positive and significant impact on MSME business development.

The results of this study also showed that financial satisfaction has a positive and significant impact through behavioral fintech on MSME business development, meaning that they also support research by Wiyono and Kirana, as well as Nurcholidah and Harsono. Hasibuan et al., (2018) mentioned that a person's financial satisfaction would change their behavior in many ways, including the adoption of financial technologies. The stakeholder could knowingly seek or continue to earn income using financial technology and believed that the application being used was actually useful (positive bias) (Nurcholidah & Harsono, 2021; Wiyono & Kirana, 2021).

The characteristics of MSMEs have a significant positive impact on MSME business development, which is the result of the analysis of this study, which supported to the results of Iskandar et al., (2020); and Mustofa & Afrilia Tina Nur (2021) who found that the business characteristics of MSMEs have a positive effect on business development. Here the difference was related to the point of view of MSME participants, namely compliance with government recommendations regarding the use of information technology and increasing the size of the business. For MSMEs that were not ready to use online transaction information technology and the business size was still small, they thought they did not need to be developed at present until they are ready and their sales increase in line with MSME expectations (Tyoso, Jaluanto et al., 2021).

MSME financial literacy was a way of managing their finances that they managed well as they planned, budgeted, managed and controlled their own finances to keep their business running smoothly or to develop the business. The results of this study statistically indicated that financial literacy has a negligible negative impact on behavioral financial. MSMEs did not fully understand financial literacy. For example, they did not conduct budgeting, financial control, but they saved some of their income for other financial needs in the future. For those who lacked financial knowledge, they strongly disagreed that financial literacy should be fully understood and implemented. Financial literacy is a topic that passions

many people because it has a big impact on personal finance. (Kicova & Gorzelanczyk, 2022). A lack of personal finance knowledge costs individuals a higher risk of going further in the business. This could lead to financial ruin if they were in an emergency. They would be able to handle any unexpected expenses. they would charge the expense to take out a loan or add to their debt. As finances become increasingly complex for all demographics, at all ages, and for businesses of all sizes, financial literacy should remain a top priority throughout our lives (Syalih, 2022; Trisnani et al., 2019). The results of this study were almost in line with the findings of the study by (Zikrillah et al., 2021) that financial literacy manifested itself in the form of financial management behavior of MSMEs in the conduct of their business. The financial opportunities were going to be able to stimulate the interest of MSMEs in the use of financial technologies (fintech) in the future (Kamil, 2020; Yuliarisa et al., 2022).

The results of this study showed that risk reduction has a positive and marginal impact on behavioral finance. This finding was supported by Fitriyadi (2019) studied that MSMEs implemented risk sharing and/or revised the payment scheme for customer orders if the MSME believed that online transactions would not be detrimental to their sales or that customers would necessarily pay for their orders. MSMEs needed proper business development and identification of situations or business processes that would not cause harm, they must use the right opportunities or proper opportunities (Dharma & Syarbaini, 2022). Similarly, MSMEs should pay attention to financial risks when developing their business (Rifqi & Izzun Khoirun, 2020).

The location of MSMEs is usually located in rural areas or in certain areas provided by local authorities. The surrounding community, family and celebrities influenced them in terms of their use of social media. Social networks options used for his business often depended on them. This research showed social influences have a positive and significant impact on behavioral fintech. The results of this study confirmed the research of Setiawan et al., (2021) that information technology in the form of certain applications that a person used and received benefits that met his expectations, the stakeholders would recommend the application to their community. An MSME participant also imitated the use of certain apps used by celebrities, as one of the benefits of social media was related to the availability of financial services (Darmansyah et al., 2020) as well as the smooth running of their business.

CONCLUSION AND RECOMMENDATION

Research findings above indicated that mediating variables that is Behavioral Financial, positively mediated Financial Satisfaction, Owner Characteristics, Risk Mitigation, Social Influences, and impact positively on Business Development respectively. Excepting the Financial Literacy variable contributed negative influence on behavioral financial, due to some of MSMEs not having yet literacy financial for their business with their assumption their business was so small and they could maintain their business by their own ways. R square information indicated that Financial Satisfaction, Owner Characteristics, Risk Mitigation, Social Influences, direct impact on MSMEs business development was about 30%, and the sample size was less than 30%. This study focused on one MSMEs sector that is culinary only with a small sample about 125.

Recommendation for future research when investigating MSMEs business should add some other relevance variables, such as, internet network availability, cyber security, customer perception on MSMEs service, and the others. Of course, the sample size must be added, and also MSMEs are more than one sector, it is better to cover all MSME sectors in the research location. Another recommendation is managing MSMEs finances and financial literacy is critical for the success of small businesses, as well as reducing income inequality.

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Utilization of the Subak Jatiluwih Landscape as a Tourism Object: Tourist Perceptions and the Impact on Village Income

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Abstract

The growing development of the tourism sector impacts increasing land conversion, which results in a reduction in productive agricultural land and the threat of subak as an agricultural institution based on local wisdom in Bali. The development of the tourism sector has eroded the existence of subak due to the high economic value of converting agricultural land to non-agricultural functions. If this condition continues, the existence of subak as a form of local wisdom in the agricultural sector in Bali will become extinct. Moreover, the subak cultural landscape in Bali has been recognized by UNESCO as a World Cultural Heritage. The heritage includes four sites (areas) which all form one unit. This study aims to analyze the use of the Jatiluwih subak landscape as a tourist object by focusing on the problem of tourists' perceptions of the subak Jatiluwih landscape and the impact of these tourism activities on village income. The research was conducted on the Subak Jatiluwih Landscape as a WBD icon. The approach used is a quantitative approach using primary and secondary data. The sample in this study was taken by interview method and documentation study, which was then analyzed descriptively. The analysis results show an increase in the number of tourist visits every year where tourists think that an interesting tourist object is a place that has uniqueness. Tourism activities also positively impacted the village economy, where the local traditional village managed and fairly shared income from entrance tickets to tourist objects.

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INTRODUCTION

The three main pillars in realizing sustainable development are by focusing on economic, social, and environmental factors (Swain, 2018). All three will be interdependent and mutually reinforcing a development process. The goal of sustainable development is how to achieve a level of economic growth by focusing on the needs of the community while maintaining environmental sustainability. Some people think sustainable development is about increasing economic growth and finding ways to advance the economy long-term without depleting natural capital. But for some people, the concept of economic growth itself is considered very difficult to achieve because the natural resources are limited (Tamarantika, April 2017). Therefore, an agreement is needed on what is referred to as the use of natural resources and the limits on the use of these resources. Agreements regarding this matter will significantly assist in formulating policies to realize the expected sustainability following development goals.

The growing development of the tourism sector has led to an increase in the rate of land conversion, which has resulted in a reduction in productive agricultural land and the threat of subak as an agricultural institution based on local wisdom within it. The development of the tourism sector demands an increasing need for supporting facilities and infrastructure such as hotels and restaurants, which in their construction results in land conversion. Likewise, the increase in population from birth and migration also demands an increase in the need for housing and various public facilities, which also require the availability of land for its construction (Prastyadewi, Susilowati, & Iskandar, 2020). The reduced amount of productive land due to this land conversion will lead to a decrease in the amount of rice production, which will then decrease farmers' income and welfare.

The existence of the subak landscape currently does not only function in agriculture, but its utilization has shifted as a tourism-supporting attraction. The subak landscape is an attraction for tourists. Terraces and farming activities attract tourists to visit. Hotels and restaurants also take advantage of this landscape as an added value to their accommodation. However, the existence of the tourism sector does not significantly impact the primary function of subak in agriculture. The increasing development has caused landowners to sell their agricultural land, likewise with the young generation of Bali who does not make the agricultural sector their job choice. This is also a threat to agriculture with the Subak organization in it. Using the subak landscape as a tourist attraction makes the subak landscape a common pool resource (CPR) based on its collective nature and management (Ostrom, 2006). Two characteristics make the subak landscape a CPR. First, everyone can use it, so it becomes difficult to prohibit other parties from using it. Second, there are difficulties in evenly sharing resources or profits in using goods. This condition, in theory, is said to create what is known as a stowaway (free rider). Anyone can freely enjoy Subak landscapes stretching out in Bali's agricultural areas. Even hotels and restaurants around the area make it an attraction to increase the number of tourist visits. However, neither the hotel nor the restaurant has donated to the land-owning farmers or subak organizations. There are no clear rules regarding the obligation to pay fees or "rent" to farmers whose fields are used as tourist attractions. This condition frees hotel and restaurant managers to utilize Bali's subak landscape.

Even though it has been designated as a World Cultural Heritage (WBD) site, special attention is needed for the sustainability of subak. The existence of hotels and restaurants that utilize the Subak landscape further adds to the threat to its sustainability. Subak landscape as a form of Common Pool Resource (CPR) creates an externality. Every tourist who visits hotels/restaurants and attractions that utilize the subak landscape as an attraction can enjoy the beautiful scenery without contributing to the subak itself. This makes hotels and restaurants free riders from the existence of the subak landscape. Internalization is a solution to resolve the externalities generated and overcome the existence of these free riders. The tourism sector, which is more promising than agriculture, will increasingly threaten the existence of subak. This is evidenced by the depletion of the younger generation working in the agricultural sector. Even though it has high cultural value, economic factors will eliminate the existence of subak in Balinese agriculture. The sustainability of subak can be maintained and protected if the agricultural sector in Bali is maintained. What's more, the agricultural sector in the Bali Province has local wisdom values that should be maintained and preserved. Therefore, this study aims to analyze tourism demand for subak land use in Bali.

METHOD

Research related to the sustainability of this subak was carried out in the Jatiluwih Subak Landscape, which is included in the WBD category by UNESCO. This research is focused on the Jatiluwih Subak Landscape because this subak landscape is an icon of WBD, known to be one of the tourist destinations in Bali with an increasing number of tourists every year. Determination of the number of samples for tourists

is determined by the accidental sampling method. Questionnaires were distributed directly and indirectly (via Google form) to tourists who had visited and enjoyed the Subak landscape, especially the Subak Jatiluwih Landscape. With limited access conditions and the closure of tourist entry in Bali since mid-2020, distributing questionnaires using social media (Instagram and WhatsApp) is the best solution for collecting tourist data. The number of returned questionnaires that can be used for this research is 100.

Descriptive statistics were used in the analysis. Descriptive statistics are related to the processing and presentation of data to provide an overview of the information needed in research (Creswell, 2009). This information will be presented as diagrams, tables, and figures. This research uses descriptive statistics to develop profiles of farmers and tourists as research respondents. The number of frequencies, average values, and standard deviations for each indicator is calculated in descriptive statistics. The average perception of both farmers and tourists is also calculated in determining the range of answers for each question item related to the demand and supply of the subak landscape.

RESULT AND DISCUSSION

Number of Tourist Visits to Jatiluwih

After Subak was designated as a WBD, the existence of the Subak landscape began to attract tourists, as well as the Jatiluwih Subak Landscape. Based on data from the Bali Regional Office (2019), information is obtained that the number of tourist visits to Jatiluwih is increasing every year. The data on the number of tourist visits to the Subak Jatiluwih Landscape is shown in Figure 1 as follows.

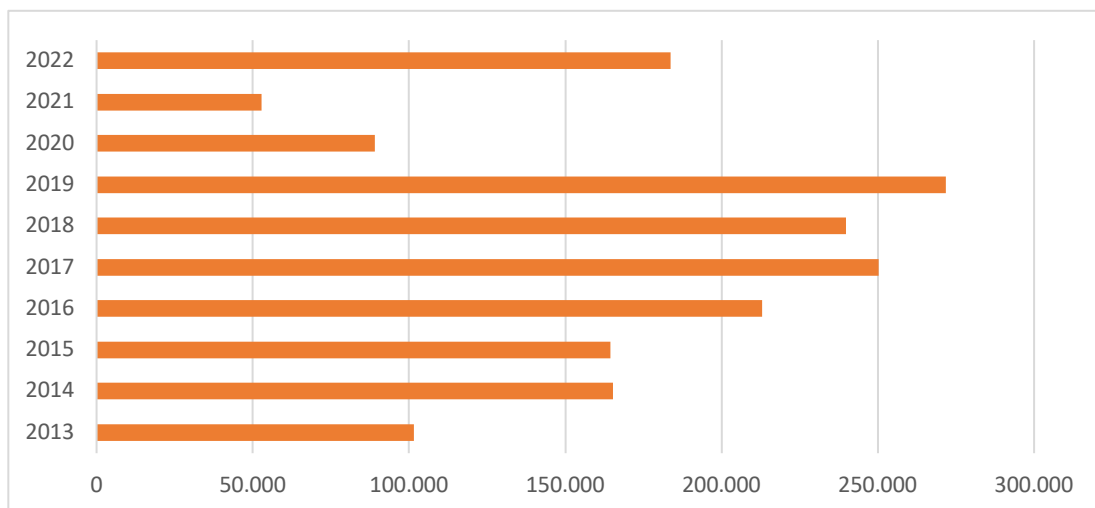


Figure 1. Number of Tourist Visits to Subak Jatiluwih in 2013-2022

Source: Disparda Bali, 2022

The data presented in Figure 1 shows the number of tourist visits to Subak Jatiluwih from 2013 – 2022. In 2012 the number of tourist visits was 97,909 people, while in 2013, there were 101,560 people, an increase of 37.28 percent. In 2014 the number of tourist visits was 165,158. If the number of tourist visits in 2013 was compared to the number of tourists in 2014, there was an increase of 62.62 percent. Even though the number of tourist visits decreased in 2018 due to the eruption of Mount Agung, an increase in tourist visits occurred again in 2019. A drastic decline will occur in 2020 due to the COVID-19 pandemic undermining Bali tourism’s glory.

The increase in tourist visits to Jatiluwih is caused by the promotion, which is quite back. Technology development makes social media one of the cheap promotions that significantly increase purchases or visits to a place. One form of digital tourism promotion currently being developed by the Bali Province Regional Tourism Promotion Agency (BPPD) is “Bali Go Live.” The Bali Go Live channel will promote Bali through the popular digital platform Youtube. Its website is supported by the latest information uploaded regularly via social media such as Facebook, Twitter, Instagram, Tumblr, and

Linkedin. Bali Go Live promotes Bali and encourages young Balinese to be more proud of Balinese philosophy and culture.

Instagram is among Indonesian society's most popular social media, especially among young people. Instagram is an effective medium for sharing information, both social and commercial. With a much lower cost, Instagram is a promotional medium for profit-oriented businesses, both small, medium, and large scale. Instagram is a social media application that can be downloaded to post smartphone photos and videos. On Instagram, there is something called a follower. Where various posts, both photos, and videos, can be seen by followers. Posts in photos or videos contain information called captions; all Instagram users can also see these posts via hashtags. Captions generally contain information (description) about uploaded images or videos, while hashtags classify themes or topics in social media. The more people post, the more hashtags they will have. What usually happens is that a post will be commented on or given a like by followers who see it. Instagram's Brand Development reveals that the most posted content by Instagram users in Indonesia is selfies, places they've visited, travel photos, family & friends, and food.

Posting tourism objects on Instagram gives a Bandwagon effect on visits to related objects. This increase in the number of visitors will be positively related to the increase in tourist attraction hashtags on Instagram. The interesting thing about this Instagram usage information is related to decision behavior; before someone goes on a trip, the first thing to do is find information about tourist objects through an Instagram account. The information obtained states that where the most popular object with many hashtags and likes will be someone's first choice to visit. This means that before traveling, tourists will look for references via Instagram, whether posted by friends or by information providers (e.g., explorebali, visitbali, wonderfullbali, etc.). Second, not infrequently posting a tourist attraction published by a friend can attract someone's interest to visit it. Third, many tourist objects that were unknown at first became popular because they were posted on Instagram accounts, such as Pandawa Beach and mangrove forests. Some hashtags for tourist objects with views of the Subak landscape in Bali are presented in Table 1 below.

Table 1. Hashtags of Some Tourist Attractions with Subak Landscape Views in Bali

No.	Tourism Object	Number of Hashtags	
		2020	2022
1	#Tegallalang	67.862	106.000
2	#BukitCampuhan	5.528	7.000
3	#Jatiluwih	44.286	81.600
4	#Cekingriceterrace	1.780	1.800
5	#Subaksembung	457	675

Source: Instagram, processed data (2022)

Social media is a good and cheap promotional medium, but it can attract someone's interest in promoting a product. The table shows the number of hashtags for 5 (five) tourist objects with views of the subak landscape in Bali. The data shows that every year the number of hashtags on these tourism objects increases, which can be used as an indicator that the number of visits to these tourism objects also increases. A place that is "viral" through Instagram social media will usually quickly attract people's interest to visit. However, this condition often causes damage to the authenticity of the area. The special promotion of social media is uncontrolled visits that can damage the existence of subak landscapes, as happened to the tourist attractions of Ranu Manduro, Mojokerto, Amaryllis Garden Yogyakarta, and Mount Rinjani.

If a WBD is used as a tourist destination, it will gradually affect the local community (Jimura, 2011). The local community's approval of tourist arrivals will significantly determine the policies and actions that must be taken by both the government and tourism object managers. The local community will significantly influence whether or not a tourist destination develops. Research related to WBD sites and tourist visits is carried out in small parks on the outskirts of German cities. The results show that visiting tourists are attracted because of the publicity of the location of the Cultural Heritage site, whereby tourists are willing to pay a higher price to preserve the site (Wuepper, 2016)

The high enough hashtags in the subak landscape area can indicate how attractive this tourist object is to visit. This is also supported by the growth of tourist visits which are getting higher as presented in the previous information. The continuity of these tourist visits can then be anticipated to not damage or change the area, like what happened to several viral tourist attractions, which suffered damage after the booming number of uncontrolled visits. For this reason, the demand side for the subak landscape, as shown by the increase in the number of tourist visits, will become one of the building blocks for the subak landscape sustainability model to remain in its primary function and one of the objects that attract tourists.

Tourist Perceptions of the Subak Jatiluwih Landscape

The existence of the Jatiluwih Landscape as a tourist attraction began in 1993, but the WBD status, which was assigned in 2012, created a stronger attraction to attract tourists. So that is when this so-called ecotourism began to appear. The relatively high interest of tourists visiting the subak landscape raises new questions about how this landscape will exist. Tourist perceptions of the existence of the subak landscape are summarized in Table 2 as follows.

Table 2. Tourist Perceptions of the Subak Landscape

Indicator	Score (%)		Mean
	≤3	>3	
Purpose and Visit Experience			
1. The uniqueness of tourist objects	13,9	86,1	4,2
2. Cultural values in tourism objects	19,8	80,2	3,9
3. Culturally oriented tourism activities	25,7	74,3	4,0
4. Traditional community activities	15,8	84,2	4,0
5. Traditional landscapes, buildings, and situations	19,8	80,2	4,0

Source: Primary Data, 2022

Tourist perceptions of the subak landscape show that the average value is in the agreed answer. The average tourist (86.1 percent) thinks an interesting tourist object is a unique place. Tourists also gave an average answer (95 percent) on the willingness to pay entrance fees for tourism objects, and 94.1 percent of tourists agreed to pay for environmental sustainability. Tourist perceptions of the existence of the subak landscape indicate that the subak landscape provides positive externalities to Bali tourism. The beauty of terraced rice fields (terracing), complete with local agricultural wisdom, is an attraction for tourists to visit. In addition, a restaurant serving a special menu with brown rice, the superior product of Jatiluwih agriculture, provides a distinct advantage for this region, as stated by Saitri (35 years), a tourist who visited with her family.

“...If you get bored of going to the beach because it’s hot, Jatiluwih can be an option. If we walk to another place, there are many views of the rice fields, but the terraced views here are extraordinary. If you don’t bring children, you can try tracking or riding a bicycle, and the scenery is much more beautiful from a different angle. Especially if you come during the festival, even though it’s really crowded, you must try it occasionally. It’s just that bringing children is a bit troublesome because it’s very crowded. Try eating at the local stalls; the brown rice is delicious. We can also buy it to take home, and some are packaged in 500 grams...”

The tourist attraction of Jatiluwih Village has the potential to be developed not only for natural beauty, but also for traditional arts and religious ceremonies that are inherent in local culture. This potential provides opportunities in the packaging of attractive attractions based on local culture by involving local communities and tourists such as research and education activities, sports, and involvement in the planting and harvesting processes. The potential for attraction needs to be supported by the comfort and safety of the tourist object environment so as to provide a sense of security and comfort for tourists. Congestion and noise are still the main problems in the convenience of tourist attractions, which are caused by obstacles in road access and limited parking space at tourist sites. Another thing that contributes to the problem is the cleanliness of tourist attractions from garbage, where the number of landfills is still limited so that it will affect the beauty of tourist attractions.

The Existence of Jatiluwih Landscape for the Economy

The development of Jatiluwih Village as a Tourist Destination Area (DTW) is a positive thing that impacts the growth of the Jatiluwih region economically both in the short and long term (Capo, Font, & Nadal, 2007); (Ihalanayake, 2013). The development of the tourism sector will tend to lead to the development of other sectors. Indirectly, the tourism sector, in the long term, will improve the welfare of residents around the area and will have a relatively rapid economic growth impact on the region. The development of the Jatiluwih region as an agricultural area provides a positive externality in its development as a DTW. This positive externality has had an incredible impact on the Jatiluwih Village area, which remains an agricultural area that will continue to exist as a DTW and a World Cultural Heritage. The positive externalities that emerge provide added value to the Jatiluwih region in maintaining the area and its environment. Using nature as a tourism area will undoubtedly have a negative impact too. Still, in the case of the Jatiluwih area, the negative impact can be minimized by the role of adat in the form of awig-awig, which as Balinese people, awig-awig is a customary rule that must be obeyed.

The importance of caring for the environment in maintaining its existence and minimizing the negative externalities that arise (Tisdell, 2005). Packaged tourism products aim to maximize profits but do not consider the impact of damage to the environment. Even though the essence of sustainable tourism is made for the good of tourism, this reason raises positive externalities in the tourism activity itself, namely increasing the sustainability of the environmental ecosystem and the existing economic system (Sgroi, 2022). Raise a caring attitude and internalize the environment by prioritizing environmental sustainability in tourism development. Research conducted by (Teo, Khan, & Abd Rahim, 2014) which was conducted on cultural heritage tourism areas in Malacca concluded that tourists have different perceptions of their purpose in visiting cultural heritage sites. Tourists tend to choose to visit the cultural area of Malacca when specific events or festivals are held. The study results also concluded that most tourists feel concerned about protecting and being responsible for preserving these cultural heritage sites. Ultimately, it was concluded that the Malacca cultural area made the Cultural Heritage status a tourist attraction to increase the number of tourist visits.

Tourism activities by utilizing the Subak Jatiluwih landscape make a separate contribution to the community's economy. Tourism receipts come from the imposition of entrance tickets to tourist objects for foreign and local tourists. Proceeds from ticket sales are distributed to ticket officers, the Regional Government of Tabanan Regency, Gunungsari Traditional Village, Jatiluwih Traditional Village, and Dinas Village. The income distribution from the Jatiluwih tourism object differed before and after the subak was designated as WBD. The revenue distribution from the Jatiluwih tourism object before the WBD status is as follows.

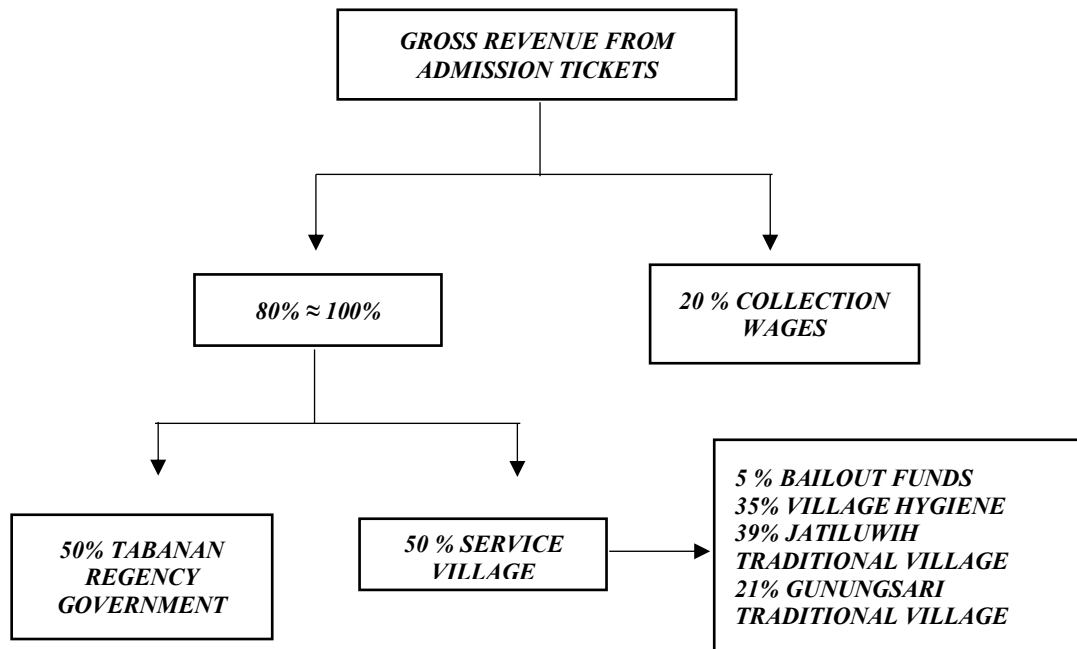


Figure 2.
Illustration of Revenue Sharing from Jatiluwih Tourism Object Before WBD Status
Source: Jatiluwih DTW Management, 2022

Village income derived from the Jatiluwih tourism object levy before Subak was designated as WBD by UNESCO in 2012 is managed by the official village. The total gross income from entrance tickets is distributed by 20 percent for collection wages, namely the people who help with ticket collection, parking, and other operations. The remainder of the collected wages is rounded to 100 percent and divided between the Regional Governments of Tabanan Regency and the Desa Dinas by 50 percent each. The income earned by the Service Village is then distributed for bailout fees of 5 percent, environmental cleaning costs for Jatiluwih Village 35 percent, given to Jatiluwih Traditional Village by 39 percent, and the remaining 21 percent distributed to Gunungsari Traditional Village. Where then, the income is set by each party that receives it.

Jatiluwih Village's income increases every year and continues to increase after the establishment of subak as WBD in line with the increase in the number of tourist visits. Village income in 2011 amounted to Rp. 466,539,000 and increased by almost 100 percent after the establishment of subak as WBD DI in

2012. In 2014 the village's income reached Rp. 3,001,059,500, - and soared to reach 9.8 billion in 2019. This increase in village income is an indicator that the WBD status of Subak has a good economic impact on both the income of Jatiluwih Village.

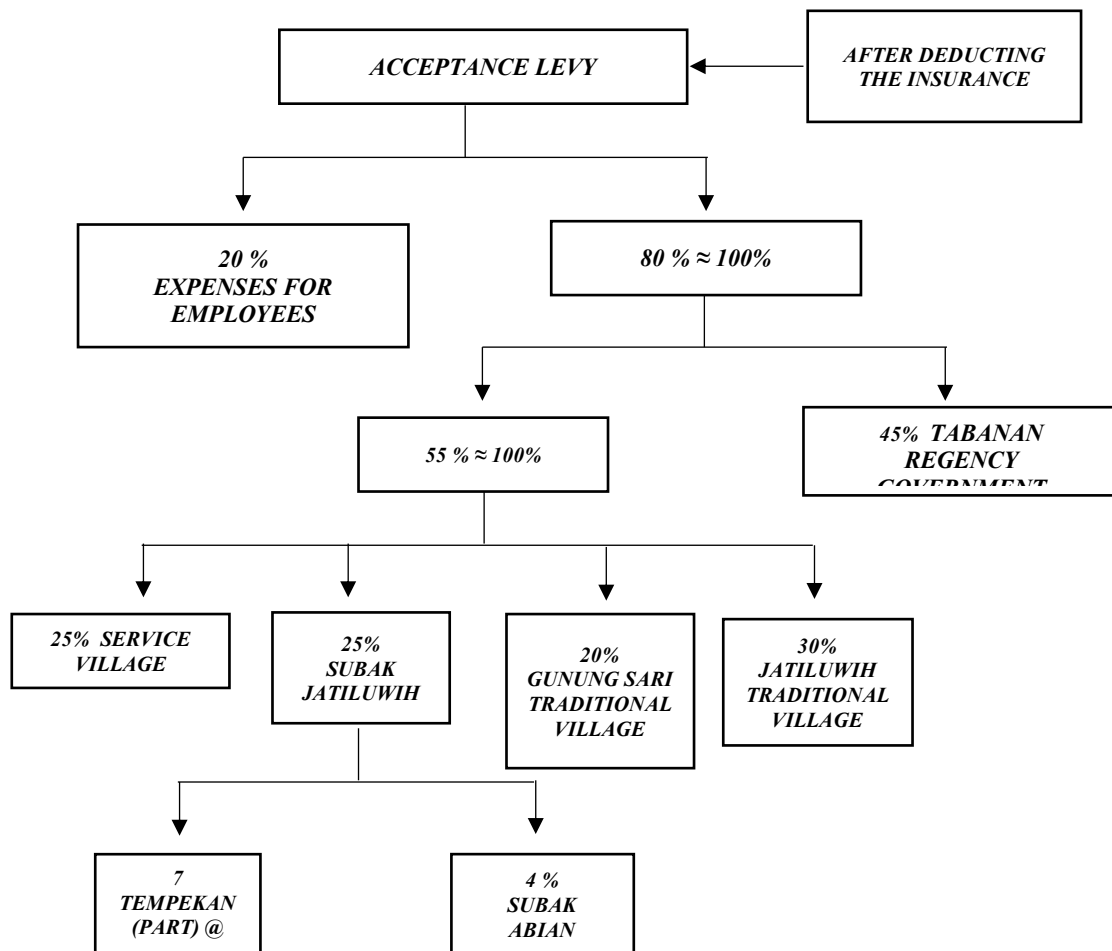


Figure 3.
Illustration of Revenue Sharing from Jatiluwih Tourism Object After WBD Status
 Source: Jatiluwih DTW Management, 2022

After subak is designated as WBD, revenue sharing from tourism as a receipt of entrance tickets to tourist objects is divided, as illustrated in Figure 3. Total receipts from gross tourist entrance tickets are deducted from insurance costs to obtain net income. This net income is then used for operations by 20 percent, and the remainder is rounded up to 100 percent to be shared with the Regional Government of Tabanan Regency with a proportion of 45 percent. The rest is rounded back to 100 percent to be divided among the official villages (25 percent), Subak Jatiluwih (25 percent), Gunung Sari Traditional Village (20 percent), and Jatiluwih Traditional Village (30 percent).

“If one may say, tourism is quite helpful for farming communities. In the past, we had costs to pay for ceremonies or repairs to subak buildings, but now we don’t have to. In fact, we got subsidies for seeds and fertilizers. We no longer pay drop fees. All expenses for religious ceremonies are borne by profit-sharing costs managed by subak and traditional villages.”

The opening of the Subak Jatiluwih Landscape to become a tourist attraction makes the responsibility for repairing some of the infrastructure used for tourism the responsibility of DTW management. Maintenance and repair of trails, such as tracking and cycling routes, are entirely the responsibility of DTW management. The maintenance and responsibility of irrigation canals and the interests of agricultural activities are entirely the responsibility of the subak. It’s just that, so far, there has been no Corporate Social Responsibility (CSR) from hotels or companies that take advantage of the beauty

of the subak landscape in the attractiveness of their accommodation even though several hotels and villas in Tabanan Regency take advantage of the subak landscape for residential views. As stated by Guru Suweden:

“...From DTW Management, there is CSR. It is in the form of additions or assistance for religious ceremonies, especially piodalan at Subak Temple and Batukaru Temple. We usually propose to ask for funds. But if there is CSR from hotels, villas, there hasn't been one...”

Research conducted by (Wells, Smith, Taheri, Manika, & McCowlen, 2016) explored the development of CSR in cultural tourism areas. The results of this study conclude that good coordination is needed between management, employees, and tourists in developing CSR. It is necessary to provide information on the importance of cultural values in tourism objects to increase CSR development. Employees and tourists need to understand why these tourism objects become cultural tourism so that they can increase their sense of belonging of employees and tourists to tourism objects. A growing tourism sector would impact the sustainability of nature as a selling attraction (Hassan, 2000). This will also cause side effects related to tourism, especially the emergence of non-economic factors due to tourism activities in Indonesia—the region. The negative impact is that no compensation is received by agricultural land owners, farmers, and the surrounding community, but this does not occur in Jatiluwih Village. The positive externalities that emerge play a more prominent role in keeping Jatiluwih green and keeping the role of subak alive to this day. One of them is by providing appropriate compensation to farmers through free fertilizer, training, and outreach to farmers. Even the local community is facilitated in carrying out traditional and religious ceremonies because the government and traditional officials very well regulate compensation in Jatiluwih Village.

CONCLUSION AND RECOMMENDATION

Subak's World Cultural Heritage (WBD) status has social, cultural, and economic impacts on the Jatiluwih Subak Landscape. The demand side shows a higher number of tourist visits to Jatiluwih tourism objects which shows an increase in demand for the subak landscape as a tourist destination. The existence of the subak landscape has a positive impact on tourism activities and an impact on increasing the income the village feels. Even though it has a positive economic impact, preservation and efforts to maintain the World Cultural Heritage must still be carried out. An analysis related to conservation methods and the role of stakeholders in the Jatiluwih area will be an interesting topic.

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The Relationship of Economic Growth, Export Value and Inflation with The Autoregressive Distributed Lag (ArDL) Approach

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Abstract

Economic growth is one of the benchmarks for the success of a country in running the economy along with the factors that influence it, so this is important to observe. Many previous studies have proven the influence of export value and inflation on economic growth. This study chooses the Autoregressive Distributed Lag (ARDL) model approach to see the dynamics of long-term and short-term relationships for the variables of export value, inflation and economic growth. The research period is quarterly, starting from 2011:Q1 – 2019:Q4 with the type of time series data. The results of this study, through the ARDL model, the variables of export value and inflation are proven to have long-term cointegration or move together in the long term towards economic growth. This study also succeeded in revealing that the variables of export value and inflation have a short-term relationship with a relatively fast adjustment time, which is 2-3 months to return to balance.

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INTRODUCTION

Indonesia's economic growth in recent years has shown a downward trend. Economic growth is one of the benchmarks for the economic condition of a country, so this will greatly affect the interest of investors to invest in a country. According to Prof. Simon Smith Kuznets, the notion of economic growth is a long-term increase in the ability of a country to provide various types of economic goods to its people.

Table 1. Indonesia's Economic Growth Rate in 2011:Q1-2019:Q4 (in percent)

	Quarter I	Quarter II	Quarter III	Quarter IV
2011	6.48	6.27	6.01	5.94
2012	6.11	6.21	5.94	5.87
2013	5.61	5.59	5.50	5.61
2014	5.12	4.94	4.93	5.05
2015	4.83	4.74	4.78	5.15
2016	4.94	5.21	5.03	4.94
2017	5.01	5.01	5.06	5.19
2018	5.06	5.27	5.17	5.18
2019	5.07	5.05	5.02	4.97

Source: Data from BPS processed

Since the third quarter of 2012, Indonesia's economic growth is no longer familiar with numbers 6 and above. In the era of free trade as it is today, the exchange of goods between countries is a necessity for a country in meeting its domestic needs. Exports and imports play an important role in the economy of a country. A country when conducting export or import transactions will be recorded in the export value balance (current account), this is part of a country's balance of payments (balance of payment). Transactions between countries in order to meet domestic needs are very important, because the economic condition of a country is determined by one of the transaction activities that run in that country. If a country has adequate human resources, sophisticated technology and a good work ethic, it will have an impact on the country being able to efficiently produce its own needs. so that it can suppress imports from other countries, this causes the export value balance to experience a surplus. On the other hand, if there are many factors that cause the adequacy of domestic goods to be low, this will certainly cause imports to soar and a deficit in the export value balance occurs.

Table. 2 Indonesia's Export Value Balance 2011:Q1-2019:Q4 in million USD

Year	Quarter I	Quarter II	Quarter III	Quarter IV
2011	45,387	53,288	53,609	51,270
2012	48,517	48,444	46,035	47,034
2013	45,415	45,653	42,878	48,604
2014	44,299	44,525	43,881	43,273
2015	39,051	39,373	36,780	35,161
2016	33,710	36,413	34,983	40,079
2017	40,732	39,264	43,379	45,451
2018	44,219	43,636	47,106	45,050
2019	40,605	39,731	43,835	43,324

Source: Data from BPS processed

The table above shows the value of exports in Indonesia for the period 2011:Q1 to 2019:Q4. From this data, it can be seen that in 2011:Q1 to 2011:Q3 the balance of transactions in Indonesia experienced a surplus, with the highest surplus in 2011:Q1 of 2,947 million USD. After the third quarter to the fourth quarter of 2019, Indonesia has always experienced a deficit in the value of exports. This is due to the increase in consumption goods but not enough supplies from within the country, so they have to go through an import mechanism from abroad to fulfill these goods.

Table 3. Indonesia's Inflation Year 2011:Q1-2019:Q4 in percent

Year	Quarter I	Quarter II	Quarter III	Quarter IV
2011	6.65	5.54	4.61	3.79
2012	3.97	4.53	4.31	4.30
2013	5.90	5.90	8.40	8.38
2014	7.32	6.70	4.53	8.36
2015	6.38	7.26	6.83	3.35
2016	4.45	3.45	3.07	3.02
2017	3.61	4.37	3.72	3.61
2018	3.40	3.12	2.88	3.13
2019	2.48	3.28	3.39	2.72

Source: Data from BPS processed

In table 3 above, the increase in inflation throughout 2013 indicates that the price of domestic goods/services has increased, so that the enthusiasm of entrepreneurs for the production process is increasing. Mild inflation is theoretically good for economic growth, but if inflation reaches moderate or severe levels, it is dangerous for a country's economy. Inflation fluctuations in Indonesia are getting more and more stable, so the economic ecosystem should be controlled and maintained.

By looking at the data above with Indonesia's economic growth tending to decline, the authors are interested in examining how much influence inflation and the value of exports have on Indonesia's economic growth in the short and long term and to determine the nature of this relationship by using an autoregressive distributed lag approach (ARDL).

Prof. Simon Kuznet, defines economic growth as a long-term increase in the ability of a country to provide more and more types of economic goods to its population, this ability grows according to its technological progress and the necessary institutional and ideological adjustments. According to Mudrajat Kuncoro (2004) an economy is said to experience growth or development if the level of economic activity is higher than what was achieved in the previous period.

Mankiw (2006) said that export is a production activity in various types of products to be traded to other countries. The export value balance (current account) is a report that contains records of transactions of goods and services of a country with other countries during a certain period (Murni, 2013: 241). The export value balance will be in a surplus if exports are greater than imports plus net transfers abroad, that is, if the receipts from trade in goods and services and transfers are greater than the payments. On the other hand, the export value balance will experience a deficit if exports are lower than imports and receipts from trade in goods and services and transfers are smaller than payments (Dornbusch & Fischer, 2004).

Inflation is a tendency to increase the general price level of goods or services that occurs continuously. An increase that occurs only once (albeit by a large percentage) is not inflation. Milton Friedman said inflation is everywhere and is always a monetary phenomenon that reflects the existence of excessive and unstable monetary growth (Friedman, 1963)

METHOD

Data Types and Sources

The type of data used in this study is secondary data in the form of a time series with the research period from 2011:Q1-2018:Q4. The independent variables used in this study are the export value balance (CA), Indonesia's inflation rate (INF), the rupiah exchange rate (BI-RATE), and the dependent variable is

economic growth (Growth). Sources of data obtained from Bank Indonesia and the Central Statistics Agency (BPS).

It consists of the research design (the method, the data, the data source, the data collecting technique, the data analysis technique, the variables measurement) that written in the form of a paragraph.

Autoregressive Distributed Lag (ARDL) Model

One of the estimation models that will be used in this study is the Autoregressive Distributed Lag (ARDL) approach. This ARDL approach is a relatively new approach compared to the Engle-Granger Test, or the Maximum Likelihood Johansen Test when it is used to test cointegration between variables for the sake of long-term analysis. The basic difference between the ARDL approach from other approaches is due to its flexibility, although the existing variables have different levels of integration, either I(0), I(1) or the same level, this approach can be used (Pesaran & Smith 1998; Pesaran & Pesaran 1997; Pesaran et al. al., 2001). This ARDL model is a combination of Autoregressive (AR) and Distributed Lag (DL) models. According to Gujarati and Porter (2013) the AR model is a model that uses one or more past data from the dependent variable among the explanatory variables. The DL model is a regression model that involves data on the present and the past (lagged) of the explanatory variables.

The advantage of the ARDL model is that it is unbiased and efficient because it can be used with a small sample. By using ARDL, long-term and short-term estimates can be obtained simultaneously, which will avoid autocorrelation problems. In addition, the ARDL method is also able to distinguish between independent and dependent variables (Zaretta and Yovita, 2019).

The relationship between economic growth, export value, inflation and the rupiah exchange rate can be explained in this study using the Autoregressive Distributed Lag (ARDL) model. The general model of ARDL is as follows:

$$\Delta Y_t = \beta_0 + \sum_{i=1}^n \beta_1 \Delta Y_{t-1} + \sum_{i=0}^n \delta_2 \Delta X_{t-1} + \varphi_1 Y_{t-1} + \varphi_2 X_{t-1} + \mu_t$$

Information:

- t, t : Short term coefficient
- 1, 2 : Long term ARDL coefficient
- t : *Disturbance error* (white noise)

As mentioned above, the ARDL model is able to detect long-term and short-term relationships.

As already mentioned, the advantage of ARDL is its ability to detect both long-term and short-term dynamics. In the general ARDL model in the above equation which is the equation for the short-term relationship is:

$$\sum_{i=1}^n \beta_1 \Delta Y_{t-1} + \sum_{i=0}^n \delta_2 \Delta X_{t-1}$$

As for the long-term relationship, it is shown by $1Y_{t-1} + 1X_{t-1}$.

In this study, to see the effect of Y and X from time to time, as well as the influence of the past Y variable on the present Y, the Autoregressive Distributed Lag (ARDL) estimation method was used.

The stages for data analysis using the ARDL approach in research are as follows (Salomo and Hutabarat 2007):

- a) Testing the stationarity of the data on the variables in the research model, both at the level and the first difference level.
- b) Testing the existence of cointegration in the Model with the Bounds Testing Cointegration Method.
- c) If cointegration occurs, the research model can be estimated using the ARDL method
- d) Estimating the ARDL model, including model selection and conducting diagnostic tests to test whether there is a violation of basic econometric assumptions, before proceeding to the next procedure. The ARDL model selected was based on the Schwarz Bayesian Criterion (SBC/SIC) which was able to select the smallest lag length or based on the Akaike Information Criterion (AIC) to select the relevant maximum lag length.
- e) Analyzing the output results from the estimation of the ARDL Model.
- f) Estimating ECM (Error Correction Model) based on the selected ARDL model.
- g) Analyzing the output results of the ECM estimation to find out the short-term dynamics.
- h) Estimating the long-term relationship coefficient of the selected ARDL Model.
- i) Analyzing the long-term coefficient of the ARDL model.

RESULT AND DISCUSSION

Data Description

This study uses quarterly data from economic growth, inflation and exports. The data period which is also the research period is 2011:Q1 – 2019:Q4, so the total number of observations is 36 observations.

Date: 02/14/20 Time: 11:01			
Sample: 2011Q1 2019Q4			
	PE	INFLASI	EKSPOR
Mean	5.329444	4.741944	43444.28
Median	5.135000	4.305000	43858.00
Maximum	6.480000	8.400000	53609.00
Minimum	4.740000	2.480000	33710.00
Std. Dev.	0.475400	1.767859	4831.167
Skewness	0.937759	0.766650	-0.017553
Kurtosis	2.622604	2.336758	2.745802
Jarque-Bera	5.489996	4.186343	0.098773
Probability	0.064248	0.123295	0.951813
Sum	191.8600	170.7100	1563994.
Sum Sq. Dev.	7.910189	109.3864	8.17E+08
Observations	36	36	36

Figure. 1 Descriptive Statistical Data

Source : Output of Eviews 9.0

From the data that has been displayed above through a visual graph, it can be seen that the trend is roughly the development of economic growth, inflation and the value of exports. Indonesia's economic growth in the period from 2011 to 2019 experienced a sharp downward trend, many factors were expressed by economists related to this phenomenon. Global economic conditions are often the scapegoat for the decline in economic growth in Indonesia, the protracted trade war between China and the United States and national geopolitics which have contributed to negative sentiment.

Inflation has experienced steep fluctuations since Q1 of 2011 to Q4 of 2015 and started to stabilize below 4 since Q1 of 2016 until Q4 of 2019. Maintaining inflation at the end of this year has indeed become a benchmark for controlling prices in the market, but it also needs to be considered Is there any indication that people's purchasing power has started to decline which will hamper economic growth.

Unit Root Test

The unit root test or Unit Root Test is a data test that is intended to determine if the data used in a study is stationary or not. A collection of data is said to be stationary if the average value and variance of the time series data do not change systematically over time or are constant (Nachrowi and Hardius Usman, 2006). In this research, the Phillips-Perron (PP) unit root test will be used. In this test, the existence of a unit root is a null hypothesis. The results of the unit root test with Eviews 9.0 are as shown in figure 2.

Unit Root Level Level

Method	Statistic	Prob.**
PP - Fisher Chi-square	5.17619	0.5214
PP - Choi Z-stat	-0.20904	0.4172

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate Phillips-Perron test results UNTITLED

Series	Prob.	Bandwidth	Obs
PE	0.5721	6.0	35
INFLASI	0.2251	3.0	35
EKSPOR	0.5837	1.0	35

Unit Root Level First Different

Method	Statistic	Prob.**
PP - Fisher Chi-square	91.0399	0.0000
PP - Choi Z-stat	-8.69436	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate Phillips-Perron test results D(UNTITLED)

Series	Prob.	Bandwidth	Obs
D(PE)	0.0000	12.0	34
D(INFLASI)	0.0000	1.0	34
D(EKSPOR)	0.0000	0.0	34

Figure. 2 Unit Root Test
Source : Output of Eviews 9.0

Based on the results of the unit root test with PP, of the three variables in this study, there is no variable that is stationary at the level, which is indicated by a probability greater than 5%. After that, a unit root test was carried out at the first difference level, from the probability significance, all variables were stationary.

ARDL Model Diagnostic Test

This test is used to test whether the resulting ARDL model is suitable and perfect. This test uses the Bounds Test. Bounds Test was conducted to test the existence of long-run association in the selected ARDL model. The results of this Bounds test will focus more on the value of the F statistic. The F-statistic value will be compared with the critical value Pesaran at the 5% level, which has also been provided by Eviews 9. If the F-statistic has a value that exceeds the upper Bounds value, the null hypothesis which states that there is no long-run association is rejected, which means the variables in the study move together in the long term.

Test Statistic	Value	k
F-statistic	16.85043	2

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	5.15	6.36

Figure.3 Bound Test
Source : Output of Eviews 9.0

Based on the results of the Bounds Test for the ARDL model in figure 3, it can be seen that the value of the F-statistic model is 16.85 which is greater than the upper bound value at the 5% level, even higher than the upper bound at the level of 2.5% or 1. %. This proves that the three variables in this study, namely economic growth, export value and inflation, cointegrate in the long term or it can be said that the three variables move together in the long term, so that later error correction can be estimated.

Short-Term and Long-Term Estimates

After conducting the Bounds test, the results showed that the four variables moved together in the long term, so that error correction could be estimated. Based on the Schwarz information criterion (SIC), the best ARDL model selected was (1,4,0).

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D(PE(-1))	-0.129703	0.174179	-0.744657	0.4640
D(INFLASI)	0.009470	0.024610	0.384793	0.7039
D(INFLASI(-1))	-0.011259	0.023681	-0.475444	0.6390
D(INFLASI(-2))	-0.055438	0.023498	-2.359296	0.0272
D(INFLASI(-3))	-0.029871	0.024693	-1.209679	0.2387
D(INFLASI(-4))	0.049255	0.025223	1.952760	0.0631
D(EKSPOR)	2.63E-05	1.07E-05	2.455791	0.0220
C	-0.035720	0.027915	-1.279630	0.2134

Figure.4 ARDL Models
Source : Output of Eviews 9.0

From the table above, the ARDL (1,4,0) model can be formed as follows:
 $D(PE) = -0.129 \cdot D(PE(-1)) + 0.009 \cdot D(INFLATION) - 0.011 \cdot D(INFLATION(-1)) - 0.055 \cdot D(INFLATION(-2)) - 0.029 \cdot D(INFLATION(-3)) + 0.049 \cdot D(INFLATION(-4)) + 0.0000262 \cdot D(EXPORTS) - 0.035.$

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFLASI)	-0.033499	0.061718	-0.542771	0.5925
D(EKSPOR)	0.000023	0.000011	2.117989	0.0452
C	-0.031619	0.023841	-1.326249	0.1978

Figure.5 Long-Term Coefficients
Source : Output of Eviews 9.0

The relationship between inflation and economic growth

In short-term testing, based on the test results figure 5 it can be obtained information and findings that the inflation variable has a significant negative effect in the t-2 period. The coefficient value is 0.055 with a negative sign. This means that every 1% increase in the inflation rate in the t-2 period, it will result in a decrease in economic growth of 0.055% with the assumption that the export value is fixed or ceteris paribus. In the long-term estimation test results, the inflation variable has no significant effect on economic growth. This answers the phenomenon in the period 2011 to 2019 inflation fluctuations in 2013 to 2015 did not affect economic growth which was in a downward trend, and in early 2016 to 2019 where inflation was stable and tended to fall, economic growth was also in a downward trend. This phenomenon could be caused by factors other than inflation that also affect economic growth.

The relationship between export value and economic growth

The effect of export value on economic growth, in the short term in period t, the value of the export coefficient is positive at 0.0000262. This shows that every time there is an increase in the value of exports by 1 million US dollars, economic growth will increase by 0.262% in period t with the assumption that the inflation variable is fixed or ceteris paribus. Likewise, when the long-term test of the export value variable has a significant positive effect at the 5% level, the export coefficient value is positive at 0.000023. Thus, an increase in export value of 1 million US dollars will increase economic growth by 0.23%. The results of this study are in line with one of the hypotheses proposed by Jung & Marshall (1985), namely the ELG

(Export Led Growth) hypothesis that exports encourage economic growth. With increasing exports, of course the utilization of natural resources, human resources and technology will be optimized, exploration into new markets both at home and abroad will also help national production. With more vigorous exports, economic growth will be pushed up even more, this will also have an impact on the flow of funds from abroad to enter the country. This research is in line with research conducted by Ari Mulianta (2017) and Adrian (2010) which state that exports have a significant positive effect on economic growth. then economic growth will be pushed up, this will also have an impact on the flow of funds from abroad to enter the country.

Estimation Result of Short-Term Equilibrium Towards Long-Run Equilibrium

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFLASI, 2)	0.009470	0.024610	0.384793	0.7039
D(INFLASI(-1), 2)	0.055438	0.023498	2.359296	0.0272
D(INFLASI(-2), 2)	0.029871	0.024693	1.209679	0.2387
D(INFLASI(-3), 2)	-0.049255	0.025223	-1.952760	0.0631
D(EKSPOR, 2)	0.000026	0.000011	2.455791	0.0220
CointEq(-1)	-1.129703	0.174179	-6.485890	0.0000
Cointeq = D(PE) - (-0.0335*D(INFLASI) + 0.0000*D(EKSPOR) -0.0316)				

Figure.6 Error Correction Term (ECT)

Source : Output of Eviews 9.0

Figure 6 above shows that the ECT (error correction term) or CointEq probability is $0.0000 < 0.05$. The ECT variable shows significant results at $\alpha=5\%$ and negative means that the cointegration model is valid and there is an adjustment in the short-term model to achieve long-term equilibrium. The ECT value can be interpreted that the adjustment process to the imbalance of changes in economic growth in Indonesia in the 2011:Q1-2019:Q4 period is relatively fast. In this study, the ARDL (1,4,0) model has met the validity requirements, so in this study we can conclude that the model will go to equilibrium at a rate of 112.9% per quarter or 37.6% per month.

ARDL Model Suitability Test(1,4,0)

Testing the suitability of the selected ARDL model is carried out so that the model chosen in this study does not violate the econometrics rules. Testing the suitability of the ARDL (1,4,0) model in this study to detect autocorrelation, heteroscedasticity and model stability. The autocorrelation test on the ARDL (1,4,0) model in this study used the Breusch-Godfrey Lagrange Multiplier (BGLM) test, by proposing the following hypotheses:

H0 : there is no autocorrelation in the residual ARDL model (1,4,0)

H1: there is an autocorrelation in the residual ARDL model (1,4,0)

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.776838	Prob. F(2,21)	0.4726
Obs*R-squared	2.135526	Prob. Chi-Square(2)	0.3438

Figure.7 Autocorrelation Test Results

Source : Output of Eviews 9.0

Based on the results of data processing as shown in figure 7, it is known that the statistical p-value for the BG-LM test is 0.34. These results indicate that at the 95% confidence level the null hypothesis cannot be rejected, which means that there is no autocorrelation in the ARDL model residuals (1,4,0).

Heteroskedasticity Test: ARCH			
F-statistic	0.342953	Prob. F(1,28)	0.5628
Obs*R-squared	0.363004	Prob. Chi-Square(1)	0.5468

Figure.8 Heteroscedasticity Test Results
Source : Output of Eviews 9.0

The ARDL model stability test (1,4,0) in this study used the CUSUM test with a 95% confidence level. The results of the CUSUM test for the ARDL (1,4,0) model in this study are as shown in Figure 9. The stability of the model is determined from the position of the blue CUSUM line, which is between the two red 5% significance lines. For the ARDL (1,4,0) model, the CUSUM line is between the significance line which proves that the ARDL (1,4,0) model is stable.

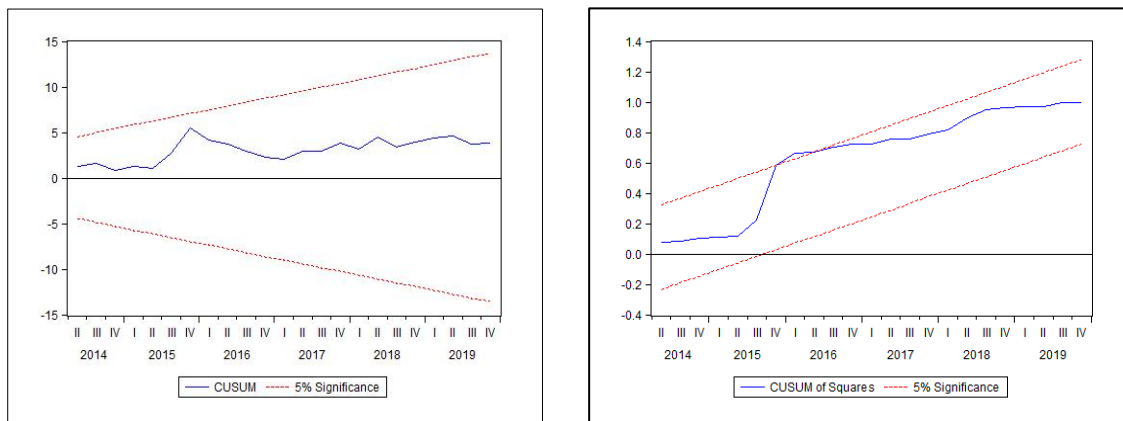


Figure.9 Stability Test Chart
Source : Output of Eviews 9.0

CONCLUSSION AND RECOMMENDATION

This study aims to see the dynamics of the relationship between the value of exports, inflation and economic growth, using the Autoregressive Distributed Lag (ARDL) approach. The research period is from 2011Q1 to 2019Q4. The Indonesian government is trying to take policies to achieve the target in the APBN, the Indonesian government must try to control inflation so that people's purchasing power is maintained, in addition the Government has taken steps to control imports, and stimulate exports by increasing industry and opening markets in other countries to reduce the deficit. export value.

Through the ARDL approach, in this study it is known that in the period 2011Q1 – 2019Q4 the movement of the export value variable and inflation has an effect on economic growth. The value of exports and inflation on economic growth are proven to have long-term cointegration or move together in the long run. The three research variables are also the dynamics of short-term relationships which have a fairly high speed of adjustment towards balance, up to 112.9% per quarter or 37.6% per month. If there is a shock in the value of exports and inflation, it will be adjusted in the next 2-3 months. Based on the results of this study, the government should be more careful in taking monetary policies to pursue and increase economic growth to a higher level. This study still has many limitations, so it is hoped that further research will add macroeconomic variables that are not used in this study.

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