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Gemas: Enhancing the Distribution of Integrated Eco-Friendly Marketing Strategies towards Digital Transformation and Global Competitiveness

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Abstract

Purpose: Various policies continue to be strengthened to develop Micro, Small and Medium Enterprises (MSMEs), which have a strategic role in the economy through the pillars of corporatization, capacity and financing to support strong and inclusive economic growth. Efforts to transform MSMEs marketing strategies are undertaken through eco-friendly digitalization to increase resilience and more productive and innovative capacity. **Research design, data and methodology:** This research is an exploratory qualitative approach taken to investigate the transformation of eco-friendly marketing strategies for MSMEs to increase competitiveness at the global level. The samples obtained were 425 MSMEs assisted by the DKI Jakarta, Bali, Java, Borneo, and Sumatera. The data collection technique used non-probability sampling (snowball sampling). Data is analyzed through collection, reduction, analysis, validity testing, presentation and conclusion. **Results:** This research shows the transformation of eco-friendly digital-based MSME marketing strategies occurred through four stages, namely production and institutional activities, expanding market share, digitalization and financing, and export market access. **Conclusions:** Eco-friendly digital transformation allows MSMEs competencies to be refined to improve business processes and business competitiveness at the international level. The contribution of this marketing strategy transformation is expanding MSMEs access to financial institutions (fintech), marketplaces, and QRIS (QR Code Indonesian Standard) digital payments.

Keywords : Global Transformation, Distribution Marketing Strategy, Eco-Friendly, Indonesian MSMEs

JEL Classification Code: D41, L11, L25, M31

1. Introduction

The government continuously improves various policies and continues strengthening them to develop Micro, Small and Medium Enterprises (MSMEs), which have a strategic role in the national economy through the pillars of corporatization, capacity, internationalization and financing to support strong and inclusive economic growth. Efforts to transform MSMEs are carried out through digitalization to increase resilience and more productive and innovative capacity. The MSME development policy is also supported by synergies that continue to be strengthened by various stakeholders between Bank Indonesia and the government, financial institutions and business associations. Transforming eco-friendly MSME marketing strategies is vital to support strong and inclusive economic stability and growth. MSMEs have a strategic

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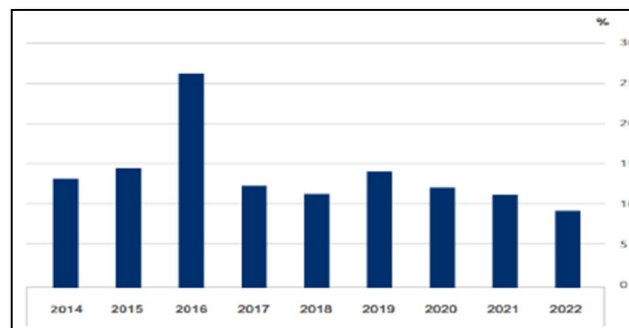
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role in the domestic economy, reflected in the large number of business units, high employment, and significant contribution to GDP. MSMEs also have high resilience in facing various crises, such as Covid-19, which places enormous pressure (Fernández-Mesa et al., 2023). The high stability of MSMEs has acted as a cushion for the economy because of their ability to survive periods of tension and grow again more quickly. This strategic role shows that MSMEs certainly play an important role in supporting the government's policy mix to maintain macroeconomic stability and other business sectors, as well as national efforts to support economic transformation towards an advanced Indonesia. Various efforts to strengthen MSMEs continue to be carried out end-to-end through optimizing the use of eco-friendly digital technology to benefit from one of the main lessons of the health crisis, namely the use of digital technology for daily activities. End-to-end development of MSMEs is carried out through the policy pillars of corporatization, capacity building and financing to create productive, innovative, eco-friendly and adaptive MSMEs. Strengthening corporatization is carried out in the institutional aspect of MSMEs to encourage the creation of an integrated business ecosystem and increase the economic scale of business to an international level (Galindo-Martín et al., 2023).

Meanwhile, capacity building is focused on increasing productivity through innovation and digitalization of business processes to encourage improvements in the competitiveness of eco-friendly MSMEs. This capacity building is carried out in an integrated manner, which includes strengthening business management, product quality, market access, financial capacity, human resource capacity, and green marketing concepts, including mastery of digital technology. Adaptation to the development of eco-friendly marketing strategies based on digital technology is one of the keys for MSMEs to move up a class to become more robust and more advanced, especially in expanding access, which continues to be encouraged to facilitate business expansion with healthier financing. MSME development refers to a roadmap for eco-friendly MSMEs that are productive, innovative and adaptive with four stages: production and institutional activities, expanding market share, digitalization and financing, and export market access (Holtzman & McManus, 2022). The digital-based transformation of eco-friendly marketing strategies will support the optimal acceleration of MSME development. The rapid development of the digital economy and finance has given rise to various digital platforms that offer innovation in production, consumption, collaboration and sharing activities. This digitalization provides opportunities for MSMEs to adapt and transform to survive and rise and grow higher, accompanied by increased corporatization,

capacity, implementation of green marketing and integrated financing. One of the critical lessons from the COVID-19 pandemic is the acceleration of digital use in meeting consumption needs, production activities and business transactions so that using digital platforms can encourage the acceleration of eco-friendly MSMEs marketing strategies, expanding access to marketplaces, industry and financial institutions (Ionescu, 2022).



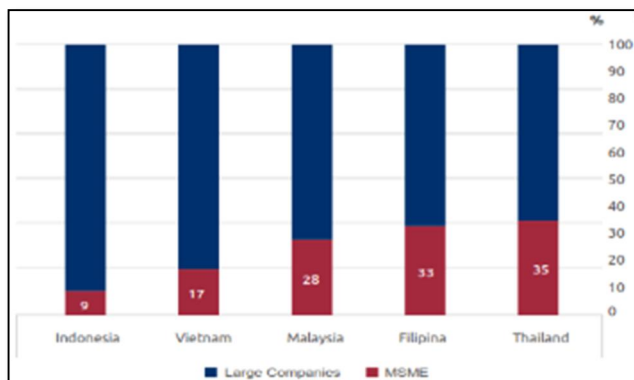
Source: Wisnantoro et al. (2022)

Figure 1: Indonesian MSME's Total GDP 2014 - 2022

MSMEs have an important role in the economy and have the potential to continue to drive national economic growth significantly. MSME business units in 2022 will reach 99.99 % of the total business units with labour absorption of 97.0% of the total workforce. MSMEs also play a major role in driving economic growth, as reflected in the market share of GDP formation, which reached 61.1%. MSME GDP growth will reach 9.6% in 2022, slowing compared to previous years (Figure 1) due to the Covid-19 pandemic crisis. MSMEs labour productivity is also increasing, although it is lower than large business labour productivity (Figure 2). On the export side of 2022, the MSME market share will be 14.4% of total exports. These statistical data show that MSMEs contribute significantly to improving the national economy and can potentially increase the share of MSMEs if end-to-end development can be distributed effectively and efficiently. This is inseparable from the characteristics of MSME products, which are close to community needs, domestic raw materials and resources, and minimal risk exposure to the financial market (Joo-Eon, 2023).

MSMEs also show flexibility in their business models, such as adopting digital technology, which is reflected in the digitalization trend in MSMEs. These characteristics enable MSMEs to provide a cushion during an economic slowdown, especially in boosting the performance of sectors that contribute greatly to the economy and absorbing many additional informal workers affected by the economic slowdown. During the 2019 Global Financial Crisis (GFC) period, MSME GDP growth remained high,

efficient interactions with consumers and business partners along the value chain and reducing waste or other negative environmental impacts (Moro et al., 2023). Digitalization is the entry point and the primary key to implementing eco-friendly marketing strategies for MSMEs to increase access to new markets, not only national markets but also global markets. MSMEs eco-friendly products, initially marketed only limited to local areas, with the support of technology, can be sold to broader national and international markets. The space for developing digital and eco-friendly marketing strategies for MSMEs is wide open. Their capabilities can be more on par with peer MSMEs through increasing national export contributions and their role in the global supply chain (Figure 4). Digitalization facilitates the development of MSMEs to capture the potential of the large domestic market, with a population of 269 million people and the global export market, with a world population of 7.4 billion people, or 28 times the population of Indonesia. Using digital technology to market eco-friendly MSMEs products lowers barriers to entry into broader markets. It is more efficient than a conventional strategy in reaching markets, especially market segmented on digital platforms (Nick et al., 2023).



Source: Bandopadhyay & Khan (2022)

Figure 4: Market Share of MSME Export Value on National Exports

The ability to survive MSMEs is influenced by implementing good management. Management includes marketing, production, human resources and finance. Competitiveness is a concept that refers to commitment to market competition for a company or industry and success in competition. To increase competitiveness, MSMEs strive to continue to innovate and be creative in developing their businesses so that the flow of disruption does not erode them. MSMEs must be able to take every opportunity to absorb developments in consumer expectations for a product. Currently, the Indonesian

government is encouraging the public to pay attention to environmental conditions which are increasingly polluted by various wastes produced and consumed by households. As public awareness grows to preserve the environment, people prefer products that positively impact the environment.

There is also global consumer demand to produce products or services with a green marketing orientation, including product development, production, energy and waste management, consumer protection, and social policies. Digital tools also have the potential to reduce export costs and the time required to export by up to 40% and 10% for manufacturing companies and 82% and 29% for service-providing companies. The experience of various countries, including China, shows that increasing productivity is essential in encouraging the economy to grow better. With the strategic role of MSMEs in the national economy and their ability to cushion the economy when economic growth slows down, the policy focus on increasing the productivity of eco-friendly MSMEs is important and urgent (Ottman et al., 2022). The COVID-19 pandemic has been able to encourage the acceleration of innovation and adaptation of eco-friendly MSMEs in responding to developments in digital technology and the new normal era, resulting in the rise of the contact-free economy and the acceleration of the transformation of consumer behaviour by utilizing digital technology to interact and carry out economic and financial transactions that are cashless and eco-friendly. During the COVID-19 pandemic, consumers in Indonesia shopped more online and made non-cash transactions, which is predicted to continue after the pandemic ends. MSMEs must immediately respond to shifts in consumer behaviour, with the drive to increase market access being the main incentive through innovation in the production process of products and services offered, along with a better understanding of consumer needs and the overall business environment. Literacy, the use of digitalization, and eco-friendly marketing concepts also encourage more adaptive and proactive behaviour of MSMEs to take opportunities for higher growth and positively impact the business environment (Pintér et al., 2021).

Distribution refers to the movement of a product from the production stage to the customer in the supply chain. Distribution determines the overall profitability of a firm as it directly affects both the supply chain cost and the customer experience. Increased environmental awareness has led more companies to adopt green distribution practices. These practices span from reducing the amount of fossil fuels and greenhouse gases used in manufacture and distribution to increased emphasis on the environment during distribution (Sugandini et al., 2020).

Green distribution strategy as the integration of environmental thinking into product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumers, and end-of-life management of the product after its useful life. Green distribution strategy includes those that reduce carbon dioxide are economically viable, and will bring about a better quality of life for the earth's future inhabitants. Green distribution strategy ranges from changing the way distribution centres and vehicles are powered to implementing greater transparency regarding the environment and distribution practices. As environmental concerns increase, the integration of environmental issues into the green distribution studies has become a thriving subfield (Pedro et al., 2020).

Camaréna (2020) stated that the green marketing strategy is a potential strategy for a successful distribution business strategy and marketing strategy axis. However, on the other hand, the results of Demeter and Losonci (2020) consider green marketing to fail to contribute further to the environment and integration of potential: competitive advantage and environmental awareness of business strategy. Enzing et al. (2020) explain the growing concern in the development of products in a manner that would protect the environment for future generations. Words like phosphate-free, ozone-friendly, and recyclable are solely associated with green marketing. Green marketing is also associated with developing and improving the pricing system, promotion and distribution of products in a manner that does not harm the environment. Qi et al. (2020) elucidate that the ultimate objective of green marketing is to sell products that are harmless to the environment and concurrently encourage consumers' support and protect the environment. This infers that businesses need to modify how they function and deliver products that are beneficial to themselves and the environment. Radnovic et al. (2022) surveyed American consumer behaviour towards their willingness to pay more for products, consumers' Eco literacy and purchase patterns. The results demonstrated that 75% of consumers would be more likely to purchase a product or service if the company can distribute it effectively and efficiently. Meanwhile, 85% of consumers are likelier to buy a product from a company that signifies Corporate Social Responsibility as its central concern and 93% of Americans have done something to conserve energy in the last two years. These apprehensions relating to the environment are evident in the environmentally conscious marketplace.

Suler et al. (2020) have identified various reasons for companies to adopt green marketing. The agreement of green marketing acts as a corporate social responsibility opportunity or competitive pressure. Thus, a company assumes a green marketing mix to encompass product

development and implement pricing, promotion and distribution strategies in its products and services. Research conducted by Ting et al. (2019) shows that green products significantly increase marketing performance. These results contradict research conducted by Uthamaputhran et al. (2019) state the green product variable consisting of product indicators that are energy efficient, eco-friendly, not harmful to health, and long-lasting has no significant effect on marketing performance. Verhoef et al. (2020) state green advertising significantly affects marketing performance. These results contradict research by Xia et al. (2021), which says that the green advertising variable has no significant effect on increasing marketing performance. Research by Yuan et al. (2023) shows that green brands significantly influence increasing marketing performance. These results contradict Zhang et al. (2022), which shows that green brand awareness has an insignificant impact on improving marketing performance.

The urgency of research regarding implementing eco-friendly and digitalized marketing strategies supports expanding MSME access to industry, thereby encouraging the strengthening of domestic supply chains. Eco-friendly and digitalized marketing strategies provide additional impetus to strengthen connectivity between MSMEs and industry along the distribution value chain. This step aligns with efforts to strengthen MSMEs through corporatization, supporting interaction and synergy between similar MSMEs and value chain integration. The corporatization context aims to expand MSME access to industry and facilitate the transfer of knowledge, including adaptation of innovation and technology to increase the productivity and competitiveness of MSMEs comprehensively and inclusively. Expanding MSME access to this industry will encourage productive and innovative collaboration, strengthening the domestic supply chain. MSMEs have ample space to implement further development of eco-friendly and digitalized marketing strategies through expanding access to financial institutions, including digital payment systems and financing services. MSMEs can develop further by considering the characteristics of MSMEs, which are mostly still unbanked with limited access to financial products and services. The development of information technology and digitalization in the financial sector has given rise to various alternative financial products and services offered by banks and non-banks, thus potentially increasing financial access for MSMEs.

Providing access for MSMEs to financial institutions through digitalization is the entry point for MSMEs to move up in class through the use of products and services in payments, financial management and financing. Access to digital payment services will increase the efficiency of MSMEs and make it easier to manage eco-friendly

businesses. Meanwhile, access to financing institutions will encourage healthier MSMEs financing to support global-scale business expansion in an eco-friendly pathway. *Based on the background and research gap, this research aims to investigate a distribution and integrated digital-based eco-friendly marketing strategy transformation model for advanced and globally competitive Indonesian MSMEs. The university study centre's strategic plan directs the centre of excellence to utilize integrated and eco-friendly information technology to improve the welfare of the community and MSMEs after the COVID-19 pandemic.*

2. Literature Review

2.1. Eco-Friendly Marketing Transformation: Strengthening Competitiveness Principles

Distributional Development Goals is an agenda approved by the UN containing 17 main goals and is expected to be achieved between 2015-2030. Sustainable Development Goals (SDGs) apply universally so that all countries in the world take a role in supporting the SDGs goals, including Indonesia. Several efforts have been made through a series of policies, such as the government's efforts to issue several regulations focusing on monitoring and achieving the SDGs. When discussing SDGs, one of the critical points is the main principle, namely, Leave No One Behind. In other words, the SDGs were designed to involve all development actors, starting from the government, Civil Society Organizations (CSOs), the private sector, and youth. One actor who should be included in taking on a role is MSMEs in Indonesia. Global warming and climate change are affecting the earth's safety in meeting the needs and welfare of humanity. Development focusing on economic growth and the negative impacts resulting from the economic development process is transformed into distributional development that prioritizes the balance of economic, environmental and social aspects. Distributional development is an effort to increase prosperity and welfare for all aspects of life in the long term by paying attention to ecological future (Zhang & Bloemer, 2018).

Banks must pay attention to environmental risk management by implementing eco-friendly principles and environmental conservation programs. In its application, green banking is a concept that determines financial institutions to always prioritize ecological future in running their business, providing banking funds to optimize the government to improve Indonesia's position as the lungs of the world to reduce greenhouse gas emissions. Indonesia has made regulations regarding digital finance, namely POJK Number 51/POJK.03/2017, regulating the

Implementation of Digital Finance for Financial Services Institutions, Issuers and Public Companies. The reason for making the regulations is to realize national prioritize development, develop a system of financial institutions in digital finance, which has been mandated in Law Number 32 of 2009 concerning Environmental Protection and Management, and encourage the national economy. POJK Number 51/POJK.03/2017 requires financial service institutions, especially banks, to prepare a digital financial action plan and produce a consistently report.

Through this regulation, banks are starting to be encouraged to distribute credit funds to Small and Medium Enterprises (SMEs) with competitiveness principles. So, banking through green funding for MSMEs helps encourage green transformation, which contributes to achieving the SDGs because banking institutions act as mediators in influencing business activities and dealing with risks related to environmental damage. Banking plays a role through financing intended for individuals and groups who work directly to support social development and have a green perspective in a focusing on recycling, repair and reuse of resources. The implementation of Digital Finance for Financial Services Institutions, Issuers and Public Companies states that the criteria for financing, including:

1. Efficiency and effectiveness, prioritizing efforts for the distributional use of natural resources, including efficient use of input materials and alternative uses input materials, effective use of clean energy, saving water and use of unconventional water sources;
2. Mitigation prevents environmental damage, increased pollution, waste, ecosystem damage, and social injustice/inequality, including avoiding and handling pollution/waste, does not trigger and has an impact on social conflict, affects increasing community welfare, environmental protection and low-carbon production processes;
3. Adaptation provides solutions for communities facing the impacts of climate change, including updating energy-saving and low-emission technologies, resource conservation and recycling, and improving the welfare of affected communities.

The advantage of the existence of MSMEs is that the quantity of business actors dominates, and if they can simultaneously carry out their business strategies and operations based on competitiveness principles, it is not impossible to achieve. The main focus is not only limited to the environment, which means nature, but the social aspect, namely humans, is also a concern, so businesses should be able to contribute not only to environmental aspects but also to social society. In its development, the principle of competitive business, which cares about environmental issues and community welfare, is

considered to play a significant role in business development, expanding market reach, building consumer trust and loyalty, and facilitating access to export markets (Yang et al., 2019). Current consumer trends also deserve attention, as more and more are considering environmental and social issues when they decide to use a product or service. People have started to care and are interested in products that prioritize competitiveness principles such as organic, eco-green, social enterprise, and child and women protection issues. Business strategies with competitiveness principles that are possible for MSMEs are organic products and eco-green or eco-friendly concepts. Organic products are products whose manufacturing process does not use chemical pesticides, synthetic fertilizers, artificial preservatives and other chemicals, so they are similar to the eco-green concept, which is a concept for managing and producing materials that always strive to be eco-friendly (Vial, 2019). Some of the benefits of eco-friendly marketing strategies include:

1. As an effort to preserve the environment through product design that is eco-friendly and can create efficiency in raw materials;
2. Increase the economic value of the product;
3. Capture market opportunities regarding demands for eco-friendly products.

During the COVID-19 pandemic, quite a few MSMEs rose from adversity through the concept of social enterprise, which encourages entrepreneurs to be socially minded, caring and empathetic to other business actors to help each other get back on their feet. The social enterprise itself takes the form of an organization or company that uses a commercial strategy (profit-oriented) to improve financial, social and environmental welfare, in other words, to maximize profits and have a good impact on every element involved in the business. MSMEs that operate with this strategy are growing in Indonesia because people's attention has shifted to consumers choosing MSME products with eco-friendly marketing strategies (Unruh & Etnenson, 2020).

2.2. MSMEs and Eco-Friendly Marketing

The factors driving MSMEs to adopt Green Marketing are economic benefits, financial incentives, stakeholder requests, legislation, resources, motivation and knowledge (Tariq et al., 2019).

1. Economic Benefits

Responsiveness to the environment for business actors is an encouragement for an increasingly competitive economic environment. The benefits of green marketing for MSMEs are reducing waste, saving costs, increasing consumer satisfaction, increasing employee commitment,

improving products, improving public relations and increasing comparative advantage. Empirical studies show a positive correlation between environmental empowerment by MSMEs and efficiency in business operations, profits and business image. In addition, by offering that MSMEs care and are responsible for the environment, they can maintain and increase market share and differentiate the organization from its competitors. Overall, the actions of MSMEs who participate in eco-friendly behavior in their production processes can improve the business profits of MSMEs.

2. Financial Incentives

The existence of financial incentives is one of the reasons why MSMEs participate in creating eco-friendly products, especially in subsidies, grants, soft loans and tax concessions.

3. Stakeholders

Internal stakeholders include owners who are leaders, staff or shareholders in MSMEs. External stakeholders include the government, related institutions, environmental management organizations, financial institutions, consumers, suppliers, local communities and the general public. Internal and external stakeholders are potential drivers in implementing technological innovation in business and change. Another study also found that management support in eco-friendly practices is a driving force for efforts to improve the surrounding environment.

4. Legislation

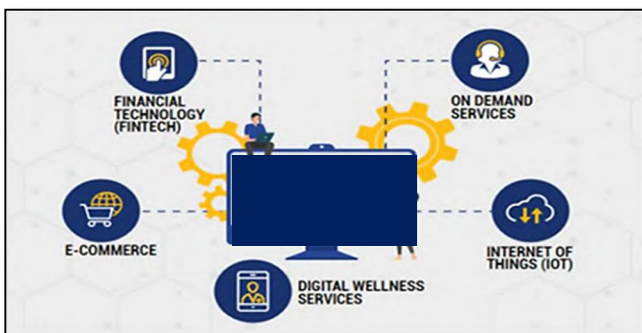
Support from the government in the form of laws and regulations can encourage MSMEs to implement eco-friendly production, distribution and marketing processes. However, the context of how the statute or regulation is developed is crucial. This is because the existence of laws can influence changes in behaviour that are more eco-friendly. Some literature shows that MSMEs care more about the environment after the government implemented the law. Through outreach, education and training regarding environmental regulations, MSMEs can be motivated to participate in improving the surrounding environment.

5. Resources, motivation, and knowledge

The existence of resources that support MSMEs in carrying out business processes that care about the environment is also a driving factor. These resources include the availability of funds and supporting infrastructure. The strong desire of MSMEs is also a primary indicator that can encourage MSMEs to participate in 'green' oriented production processes. For this reason, socialization and education are necessary to motivate MSMEs to apply eco-friendly production processes.

2.3. Digitalization: MSMEs Go Digital

The society 5.0 revolution is known as the concept of industry in the digital era. It has a social focus, which is developing more rapidly and broadly impacts all activity processes within the organization. Revolution refers to fundamental changes in various fields that affect social and cultural aspects and concern the main points of social life. The Industrial Revolution resulted in rapid changes in the economic sector by using machines to process raw materials into ready-to-use materials more efficiently by reducing the use of chemicals and waste. The development of society 5.0 technology has significantly impacted business regarding economic, social, cultural and disruptive technologies that have drastically changed how companies run their business. There are four main impacts of the Society 5.0 revolution for firms in all sectors: shifting customer expectations, improving product quality using data, changing operational models to digital models, and forming new collaborations. The main consequence of Society 5.0 is the creation of Factories of the future where production processes provide unlimited data flow throughout the business cycle and fully automated production systems supported by sophisticated data and efficient operations, thereby improving quality and providing cost and capital savings. MSMEs who can take advantage of the advantages of society 5.0 technology will experience rapid progress in their business processes by increasing production, marketing, financing and payment capacity. This digitalization is essential and must be carried out by MSMEs with the benefits of a Less Contact Economy, Increased global market access, Increased access to financing, Increased competitiveness of MSMEs, and Increased production efficiency and business processes (Shahzad et al., 2020).



Source: Shahzad et al. (2020)

Figure 5: Transformation and Utilization of the Digital Economy

Business digitalization is not just about using technology to replace human labour but is more about how

each business unit can create automated and integrated systems with each other. Digitalization's role in business and industry is divided into several parts: (Reis et al., 2018)

1. Digitalization of Production: when the Industrial Revolution 4.0 era began, production lines slowly shifted to digital technology. Even the machines used for production are technology-based, using quality control automation and utilizing programming algorithm models. Digitalization in output will make production results more uniform in quality, even with minimal supervision. Of course, this is a significant change compared to using full human power;
2. Digitalization of finances and systems is much more practical and easy to use than physical money, and digital cash makes it easy to carry out long-distance transactions. Financial digitalization is also present in terms of recording. Since the proliferation of various cashier and bookkeeping applications, business actors can now easily record the financial condition of their business so that the position of business financial reports is more accurate than before. Business people also don't worry about losing their financial data because all data can be stored in the Cloud from any device;
3. Digitizing reports can help entrepreneurs and evaluators find irregularities in their business strategy, both positive and negative. Suppose there is a drastic increase in sales. In that case, they can find the cause of the rise because the report is integrated with the sales system and marketing system;
4. Digitalization of services such as customer service is vital in business because not all customers can understand the products or services offered by the company or business unit. Digitizing services can help customers answer questions effectively and efficiently, and one example is using chatbot technology, which can provide personalized answers automatically;
5. Digitalization of marketing allows business actors to promote products to customers without spending much budget, and the results can be measured more accurately.

In the process of increasing the ability of MSMEs to digitalize, digital literacy needs to be strengthened through various media channels that are easily accessible and capable of reaching as many MSMEs as possible, as is the effort made by many parties, including the provision of online learning media channels. Digital literacy is the ability to understand and use information from various formats and more comprehensive information sources that can be displayed via computer devices. Digital literacy skills make someone able to transform activities through the use of digital technology devices. With digital literacy

skills, MSMEs can process various information, understand messages and communicate effectively with others in different forms and patterns. In this case, the structure or pattern referred to is creating, communicating, collaborating and how technology must be used to achieve goals effectively (Qamar et al., 2020). Strengthening digital literacy through: (Changjoon et al., 2024)

1. Raising MSMEs products through local communities and applications;
2. Establishment of a pattern for coaching and training for MSMEs and the existence of a digital catalogue;
3. Community collaboration and technology solutions;
4. Promotion and marketing support for MSMEs products.

Sophistication in marketing products using digital media is necessary for MSME entrepreneurs who want their businesses to continue running amidst limited situations that do not allow sellers to meet with buyers

because of the COVID outbreak or the inter-city sales system. From here, MSMEs can feel the changes that lead to changes in digitalization behaviour in this era. Many aspects must be considered in their business activities, from product management, financial recording and product marketing to customer aspects, all of which can be managed digitally. Facing the disruptive innovation era, the Government is seriously preparing itself by empowering MSMEs to compete. Initiating an eco-friendly digital marketing strategy model can support the Government in improving the MSME economic sector after the COVID-19 pandemic. In addition, the successful implementation of this marketing strategy is also an effort to develop a smart nation that can become a potential platform by contributing 6.52 per cent to national economic growth (Oyewole et al., 2021). Several aspects are emphasized regarding the contribution of the marketing strategy model to the smart nation concept, as follows:

Table 1: Smart Nation Program

No	Aspect	Involvement
1	<i>Smart governance</i>	Finance, information disclosure, licensing, public information centre, public services
2	<i>Smart branding</i>	Eco-friendly digital MSMEs sector, regional tourism, social media
3	<i>Smart economy</i>	Crafts, souvenir centre, processed snacks
4	<i>Smart giving</i>	Stability of population growth, urban planning, "Smart Nation" card
5	<i>Smart society</i>	Thematic areas, increasing number of jobs, enormous industrial gateways

Source: Nuryakin & Maryati (2020)

May et al. (2021) discusses the industry's view of India's fast-developing economy, moving towards a green philosophy, and further investigates the initiatives taken by the industry to become eco-friendly. The research method used is quantitative research with an exploratory approach aimed at companies that produce durable goods, non-durable goods and service companies. Researchers say companies should be able to view environmental problems as business problems and should invest in environmental problems, as they do for problems that normally occur in their business. Companies should view eco-friendly ideas as investments from a long-term perspective and consider how these ideas will benefit all the company's stakeholders in the future. Companies in developing countries such as India that produce durable goods, non-durable goods, and service companies have high concern for environmental conditions. The company believes consumer choices have shifted to consuming eco-friendly products. Companies that have an eco-friendly image will gain special advantages and can maintain their products in the market. This research shows that companies in India believe that practising green marketing will achieve a competitive advantage and support distributional growth to face the dynamic global market challenges.

Lee and Han (2022) discusses the extent to which MSMEs implement green business in Kalimantan Province,

such as green input, green process, green output, green marketing, government regulations and public awareness to improve marketing performance and competitiveness of MSMEs in the national market. The research method used is a quantitative approach using primary and secondary data. The sample used was 300 MSMEs, using regression analysis and ranking with Likert scores. The results of field data analysis explain that MSME actors in Kalimantan Province are said to have implemented eco-friendly businesses. This is shown by the acquisition of Green Input of 75.32%, which means that the implementation of green input has been carried out well. The implementation of the green process was 73.72%, which means the implementation of the green process has been implemented well. Meanwhile, the implementation of Green Output has the smallest value, namely 42%, but still indicates fairly good implementation. This means that MSMEs in Kalimantan Province are still producing goods or services that are not eco-friendly. For the implementation of green marketing, it has a value of 66.4%, which shows that marketing activities are eco-friendly. The perception of the value of business actors towards government regulations has been well received, indicated by a high Likert value, namely 74.6%. The awareness of MSME actors in Kalimantan Province shows they are environmentally conscious, scoring 63.36%. One effort that the government

can make is to establish regulations or policies that regulate the implementation of green businesses.

The results of Rajadurai et al. (2021) state that the process of implementing green marketing to form a company brand image is divided into 2 (two), namely internal and external applications. Implementing green marketing internally is a program such that the products produced do not negatively harm consumers and the environment. Reducing paper use and optimizing the use of technology such as websites and ebooks in promotional activities so that they are easy for clients to use. The product price can be competitive due to the success of saving energy and water usage to maintain the company's image, and distribution channels are carried out by minimizing raw material leaks. Disseminating information to stakeholders and shareholders about green marketing is delivered in various ways, including social media. Meanwhile, for external application of green marketing, such as a company having extreme green qualifications consisting of product, promotion, price and place aspects. Supply of eco-friendly raw materials and operational goods, as well as implementation of ISO 14001 and use of a just-in-time system. Some politics support green marketing from the company and the government. Pressure from organizations or NGOs that demand companies to care more about the environment.

The results of Kerényi and Molnár (2017) show that green marketing is related to the direction of the green consumerism movement, which is a continuation of the global consumerism movement which started with consumer awareness of their rights to obtain appropriate and safe products so that the demand for eco-friendly products becomes stronger. Meanwhile, Green consumers believe that real environmental problems must be handled seriously and responded to actively. They feel they get enough information daily that everyone can and must contribute to saving the earth from environmental disasters. The application of green marketing has many benefits, including carrying out environmental responsibility, creating a positive image of the company in the eyes of consumers, seeking new markets or opportunities, gaining a competitive advantage, and increasing the value of products or services. In green marketing practices, what must be done is green innovation and green processes continuously to increase the company's competitive advantage and go green. By implementing a green marketing strategy, the company must manage its products. (product stewardship) intensively. Companies that carry out product management will gain various benefits, namely being able to get out of a detrimental and dangerous business, redesign existing product systems to reduce liabilities and develop new products with more economical recycling costs. Companies that produce eco-friendly

products will benefit from exclusive access to limited resources, namely raw materials, consumers, location and production capacity. Another advantage is that you can propose to the government to establish unique legal regulations or standards tailored to the company's capabilities. In this way, companies that can already produce technology that meets eco-friendly standards will have the opportunity to apply to the government to implement standard regulations for all companies that make the same product.

3. Research Methods and Materials

This research is an exploratory qualitative approach to investigate the transformation of eco-friendly marketing strategies for MSMEs to increase competitiveness at the global level. The process uses primary data in direct responses from informants regarding the transformation of eco-friendly marketing strategies through interviews. Apart from that, the samples obtained were 425 MSMEs assisted by the DKI Jakarta, Bali, West Java, Central Java, East Java, East Kalimantan, West Kalimantan, Central Kalimantan, North Kalimantan, South Sumatra, West Sumatra, North Sumatra. Technological infrastructure and the ability to implement eco-friendly digital marketing programs for the MSMEs they foster to increase their international competitiveness. They were also chosen to ensure that these provinces become role models for other provincial governments in implementing plans to accelerate distributional economic recovery in the long term. Data is analyzed through data collection, reduction, analysis, validity testing, presentation and conclusion. This method can explain, assess and visualize eco-friendly marketing strategy transformation models for MSMEs rationally, comprehensively and optimally. Primary data from interview results is combined with secondary data, such as supporting studies, to formulate an ideal eco-friendly marketing strategy transformation model for Indonesian MSMEs. The data acquisition process in this research is as follows: (a) Direct Observation (Researchers observe MSME business practices in several potential areas to obtain ideal role models); (b) In-depth Interview (The process of obtaining data by asking several in-depth questions to MSMEs using non-probability techniques (snowball sampling) which selects samples in a continuous network). Some of the questions asked in the in-depth interview process include: (Jarvis et al., 2023)

1. Can green marketing reduce your production waste?
2. Can green marketing save your overall business costs?
3. Are you satisfied with green marketing activities for your product packaging or costs?
4. Are you committed to implementing green marketing?

5. Is your relationship with the surrounding community strengthened thanks to green marketing?
6. Does your company have a comparative advantage with green marketing?
7. Does the government provide subsidies and facilities related to green marketing activities in your company?
8. Does the government provide your company with soft loans through financial institutions with green marketing?
9. Does the government provide tax reduction facilities with the use of green marketing?
10. Is your company's available funds sufficient to carry out green marketing activities?
11. Is there any infrastructure that supports green marketing activities in your company?

Through eco-friendly digital marketing programs, there is integration with relevant stakeholders to determine

policy direction to provide access opportunities to potential MSMEs to increase their business competitiveness to an international level. Eco-friendly digital marketing programs are also used to increase the capacity and feasibility of MSMEs in accessing financial institutions and encourage financial institutions to provide financing services to MSMEs more efficiently so that the ultimate goal is to achieve competitive, independent and prosperous business independence and growth. The research flow scheme begins by analyzing the potential of MSMEs in Indonesia, most of which come from home industries. By implementing an eco-friendly digital marketing program, it is hoped that Indonesian MSMEs' digital-based marketing system and business strategy can encourage the transformation of competitiveness to the international level.

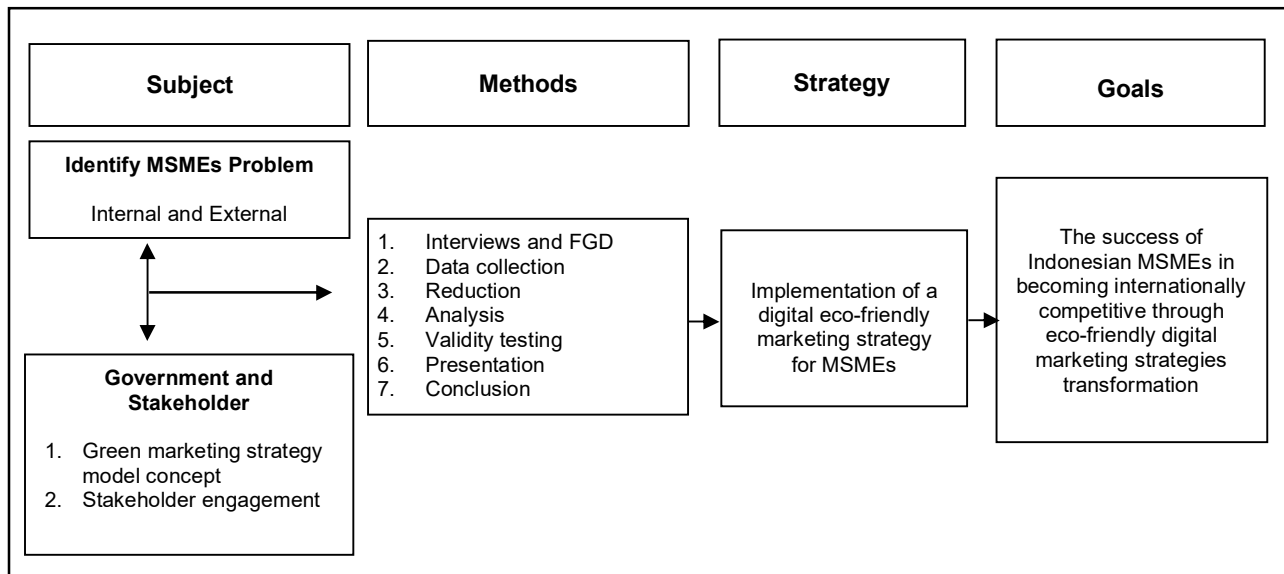


Figure 6: Theoretical Framework

4. Results and Discussion

Results of interviews and observations of MSME respondents who implemented Green Marketing in their companies. Knowledge regarding the efficiency of reducing marketing waste with the transformation of eco-friendly digital marketing strategies, all informants understand the benefits, advantages and future potential to compete at an international level. However, despite all the advantages and potential they have, MSMEs also experience various obstacles originating from weaknesses in the company's internal and external resources, including:

1. **Financial Limitations;** MSMEs in Indonesia face two

main financial aspects, including capital (initial capital and working capital) and long-term finance for investment, which is needed for long-term competitive growth.

2. **Limited Human Resources (HR);** One of the severe obstacles for SMEs in Indonesia is primarily in entrepreneurship, management, production techniques, product development, quality, accounting, machines, organization, data processing, marketing techniques and market research. These skills are needed to maintain or improve product quality, increase efficiency and productivity in production, expand market share and penetrate new markets.

3. **Raw materials;** One of the severe problems for the growth of competitiveness and continuity of production is the transformation of the marketing strategy of Indonesian SMEs. Many MSME centres have difficulty obtaining organic and eco-friendly raw materials or inputs because the prices are higher than usual.
4. **Technological limitations;** The obstacle for Indonesian MSMEs is still using traditional technology in the form of old, manual machines. This technological backwardness results in low production quantities, efficiency in the production process, and low product quality, which can prevent Indonesian MSMEs from competing in the global market. Technological limitations are caused by many factors, such as limited investment capital to purchase new machines, limited information regarding technological developments, and limited human resources who can operate new machines.

Meanwhile, external factors are usually related to the developers and MSME supervisors, such as the programs provided by the government often overlap so that they need a clear direction, and there is no monitoring of solutions to MSME problems that are not on target. However, if they only depend on government support, MSMEs will still not be able to develop significantly according to global market needs. In its development, people's lives have also become increasingly connected to the use of technology for various things, including meeting daily needs in the business sphere and awareness of protecting the environment by using eco-friendly products. MSMEs need to consider these multiple changes in conditions in determining the transformation of their marketing strategy. The problems that arise in increasing the productivity of MSMEs are limited access to formal financial institutions, production technology, human resource capacity, raw materials, waste processing and marketing. In addition, MSMEs that dominate business units in Indonesia are generally managed informally with low levels of education and suboptimal workforce skills. This situation affects the ability of MSMEs to increase business productivity and innovate, and some of them need help to innovate independently. Strengthening innovation in eco-friendly digital marketing strategies for MSMEs will support inclusive growth, reducing the productivity gap between MSMEs and other larger-scale businesses. Increasing innovation in eco-friendly digital marketing strategies for MSMEs can also be optimized by taking advantage of increasingly accelerated digital economic and financial developments to support implementing planned programs. Efforts to increase national economic productivity require improving the performance of MSMEs.

Experience from various countries, including China, shows that increasing productivity is vital in improving the

economy. MSMEs have realized that when digitalization is implemented optimally, the result is that the business is data-driven, agile, and consumer-centred, which means it can also be competitive in the future. The industry and public sectors undertaking eco-friendly digital transformation aim to improve their work, deliver public services, engage stakeholders better and provide solutions that impact everyone and the environment. Green digital transformation can help companies gain and maintain a competitive advantage by increasing their flexibility and resilience and enhancing their dynamic capabilities. The eco-friendly digital transformation process is a consequence of combining information technology for most internal and external business operations by paying attention to environmental impacts as a side effect of the business practices carried out. Green digital transformation facilitates effective consumer engagement throughout the customer's lifetime. The rapid development of information technology, increasing competition, and changes in business orientation towards a customer-centric approach that cares about the environment have accelerated the word-of-mouth process and marketing strategies in all business sectors.

Smartphones, social networks, big data, cloud computing, data analytics, artificial intelligence, and the interconnection of internet-related devices are at the forefront of optimizing eco-friendly digital transformation. If not addressed, the uneven diffusion of digitalization use can have important implications for company productivity performance because it continues to disrupt eco-distribution. The productivity gap between adopters who quickly understand and apply eco-friendly digital functions and slow adopters will be significantly affected. Digital technology is changing the ecosystem of entire industries, including countries involved in digital transformation aimed at improving how to operate, deliver public services, better engage stakeholders, and provide citizen-centred solutions that impact everyone and the environment. The increasing diversity of technology is creating new business models which aim to deliver excellence through services tailored to customer needs. It is believed that eco-friendly digital transformation can improve the quality of life and improve people's welfare, ultimately impacting the achievement of SDGs and increasing the marketing performance of MSMEs.

Massive service improvements are one of the pillars of eco-friendly digital transformation, which is expected to encourage better collaboration between MSMEs when carrying out business activities. Every business uses repeatable processes to optimize green digital marketing strategies related to manufacturing, resources, or finances. Eco-friendly digital transformation allows MSMEs competencies to be refined to improve business processes

and business competitiveness at the international level. The beauty of eco-friendly digital transformation is that it can target several parts of the business or the entire company so that MSMEs can experience the benefits of significantly increased efficiency. MSMEs adopt the unrivalled power of modern technology, and workflows become faster, tidier and easier to repeat processes so that business performance evaluation is standardized. Apart from that, MSMEs can spend time focusing on ideas and innovation so that there is a strong possibility of increasing the value of the number of orders for a product or service and the number of

customers. Eco-friendly digitalization can simplify business communications where previously, customers had to spend time and use transportation to order MSMEs products. Apart from that, MSMEs have also become more agile in the modern era like today because, in the modern technological era like today, agility is a trait that must be present for MSMEs because they need to adapt to every change, both those that have occurred and the future. Gone are the days of rigid, slow-moving MSMEs dictating to customers.

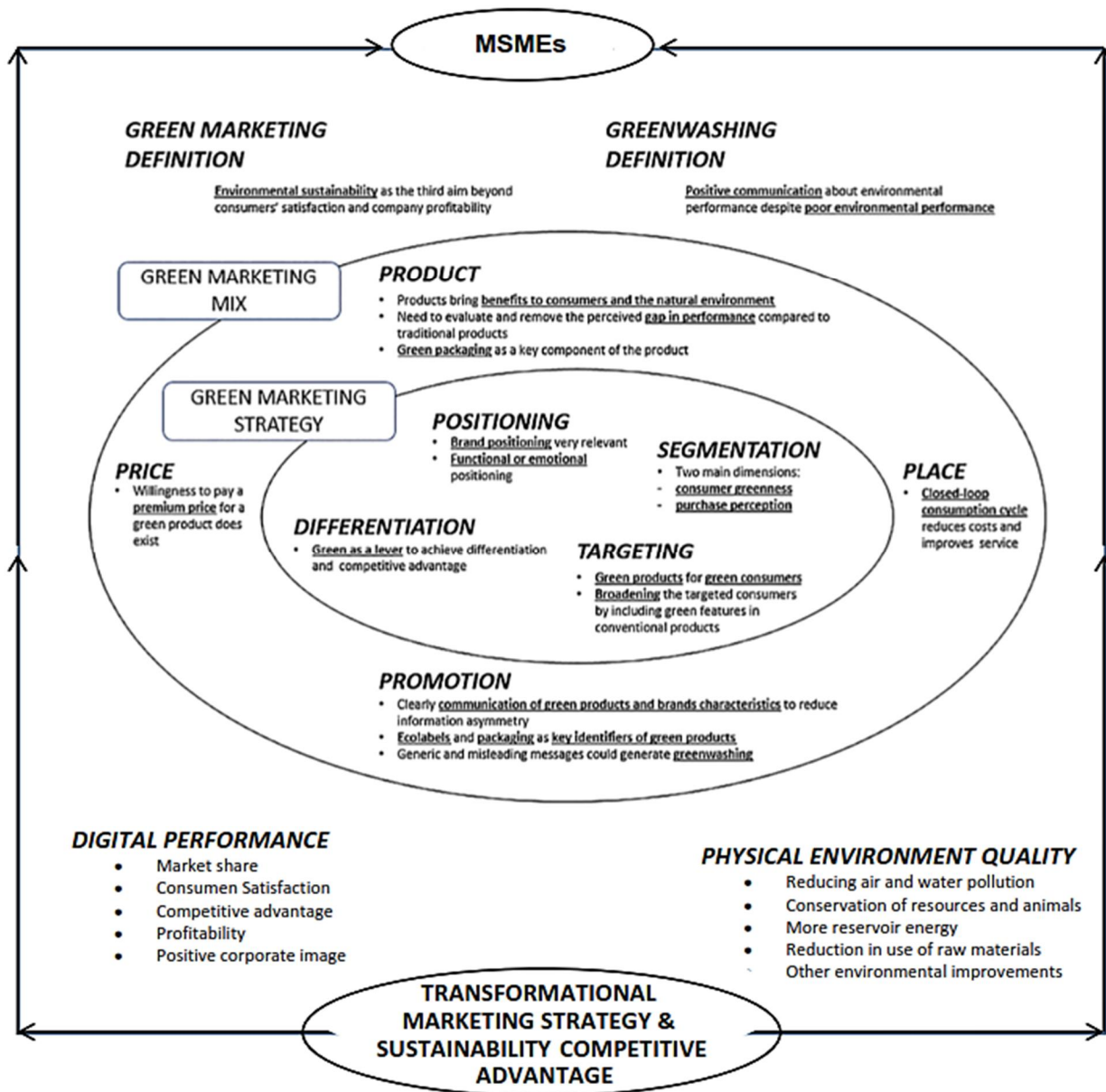


Figure 7: GEMAS: Distribution Eco-Friendly Marketing Transformation Strategy for Indonesian MSMEs

In contrast, today, even the largest companies must adapt to trends and listen carefully to their consumers according to their expected needs. Digital technology enables businesses to be connected with elastic flexibility and supports green marketing activities. Decision times are reduced, and digital transformation can simplify decision cycles. Large numbers of data points can be measured and analyzed with the aim of greater improvement and agility. Passive acceptance, Connection, Immersion, Fusion, and Transformation are phases in implementing eco-friendly digital technology in MSMEs. The very low adoption of technology results from passive acceptance because MSMEs feel they can still meet market needs without making significant changes such as adopting digital technology. The increasing adoption of digital technology is marked in the Immersion phase by the dependence between operational business activities and the use of technology.

Changes in the business activities of MSMEs when adopting digital technology are when they no longer use personal accounts in marketing activities but instead use official accounts according to the results of re-branding so that they can expand their market share more widely and expand their network of connections/relationships with other business actors who run business in the same field both on a national and international scale. The adoption of digital technology (social media), which is used as an eco-friendly marketing medium in achieving the vision and mission of MSMEs, has entered the Fusion phase, which is the belief of MSMEs who initially used digital strategies to support business strategies, but are now used as the main need to achieve successful marketing transformation eco-friendly digital. The Transformation Phase is marked by adopting eco-friendly digital technology, which is implemented side by side. Consumer behaviour that has shifted from offline to online has motivated MSMEs not to want to be left behind by competitors in the same business field. Apart from that, MSMEs can also build and maintain good relationships with customers to synergize with the adoption of digital technology. Suppose this eco-friendly digital strategy alignment phase is achieved. In that case, it can quickly anticipate signs of change occurring in the

business world and become an innovation for MSMEs to face the future of global industry more intensely.

Increasing economies of scale that increase production and reduce costs can also positively impact increasing MSME productivity. Increasing economies of scale will benefit MSMEs, including more efficient purchasing, production and administrative management activities. Purchasing raw materials in larger quantities will give MSMEs a better bargaining position to obtain lower raw material prices. Increasing economies of scale also enable the division of labour tasks and the use of skilled labour, diversification of products with higher added value, and increased access to financing in line with decreasing transaction costs for financial institutions. Increasing the economic scale of MSMEs through business expansion accompanied by increased productivity and efficiency. Increasing the economic scale externally is also possible through MSME cooperation in a strong MSME institutional bond so that MSMEs can jointly achieve a larger economic scale. Clustering is widely used because it allows MSMEs to benefit from increased economies of scale. The government must formulate a National Strategy for MSMEs Development, which is based on three main pillars: strengthening corporatization, increasing capacity and access to financing to create competitive MSMEs to accelerate inclusive economic growth (Figure 7). Strengthening corporatization is done to increase economic scale or added value through strengthening groups of MSMEs (clusterization) with similar, complementary or related businesses with similar locations or interests. It is hoped that strengthening corporatization will encourage the creation of an integrated business ecosystem that supports productivity improvements. Increasing the capacity of MSMEs is intended to improve MSME capabilities, both in terms of human resources and business development. Meanwhile, strengthening access to financing aims to expand alternative formal capital sources for MSMEs following business development and needs. Strengthening corporatization, increasing capacity and access to financing is done through synergy with various stakeholders, including Ministries/Institutions, Regional Governments, the private sector, associations/communities and universities.

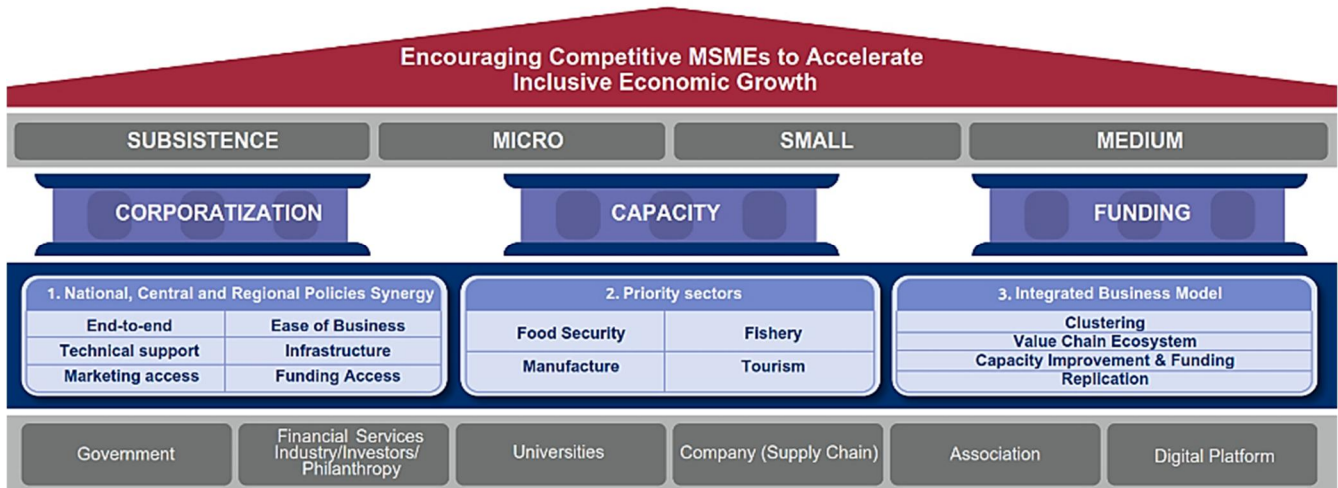


Figure 8: National Strategy for MSMEs Development

Strengthening corporatization will encourage the integration of a series of business value chains, both horizontal and vertical. MSME institutions continue strengthening through corporatization, supported by strong social capital. Groups are built based on mutually beneficial cooperation, directed towards increasingly formal and modern institutional forms, whether cooperatives, limited liability companies, or other institutional forms. Corporatization is also carried out through cooperation and partnerships between MSMEs and between MSMEs and partners along the value chain, with horizontal and vertical approaches. The horizontal MSMEs

corporatization model consists of MSMEs forming an institution to increase aggregate production capacity and collaborate with business-supporting institutions in a particular business sector. The vertical MSME corporatization model consists of various types of businesses interconnected in a series of business value chains to create value-added products. This integration will encourage an increase in the economic scale of MSME businesses (Figure 8). With a larger economic scale, corporatization will provide other benefits for MSMEs, namely increased market access, financing and human resource capacity.

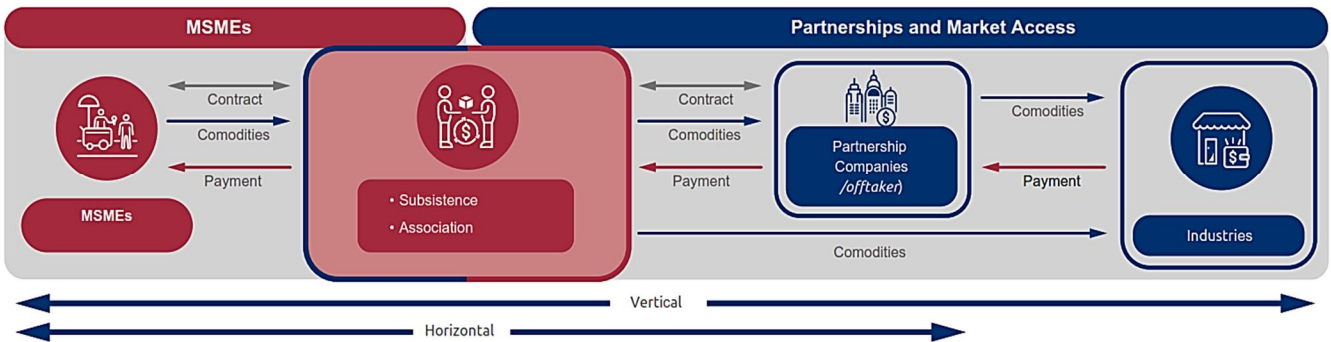


Figure 9: Generic Model of MSMEs Corporatization

Efforts to increase the number of MSME corporatization in Indonesia and replication of the best cluster business models continue. Replication can be carried out in horizontal and vertical approaches, including by applying technology, innovation, planting methods, institutional aspects, and eco-friendly business management in the best cluster business model. A horizontal approach is applied to maintain the main

activities in the cluster, including collection point management and auction markets. The benefits obtained from the development of corporatization are eco-friendly digital marketing or joint production sales by implementing an auction market system to increase the bargaining position of MSMEs in the industry. Capacity improvement for MSMEs will encourage increased added value through the ability to develop new eco-friendly products. It is also

hoped that increasing capacity will support improvements in MSME productivity, which is necessary to improve competitiveness. The not-yet-optimal capacity of MSMEs cannot be separated from the more informal nature of business management, which impacts the production process's inefficiency. In the long term, improving the competitiveness of MSMEs will increase their role in local

and global production chains that carry out exports. The MSME capacity development strategy refers to a road map that leads to eco-friendly digital MSMEs both in terms of business resources and potential to be more competitive based on business capabilities, namely Potential MSMEs, Successful MSMEs, Eco-friendly Digital MSMEs, and Export MSMEs (Figure 9).



Figure 10: Roadmap of MSMEs Indonesia Development

Capacity building is carried out in an integrated manner to increase productivity, including through the digitalization of eco-friendly marketing strategies for MSMEs. Increasing the capacity of MSMEs includes strengthening business management, improving product quality, expanding market access, increasing financial capacity and increasing human resource capacity, including mastery of eco-friendly digital technology. In the early stages, MSME development has the potential to focus on strengthening institutions and increasing business scale. Successful development of MSMEs is directed at efforts to improve the quality of product design and packaging and expand market access, including using eco-friendly technology through the MSME onboarding program for e-commerce. The capacity of digital MSMEs continues to be strengthened through optimizing the use of eco-friendly digital technology in production and marketing processes, including payment transactions and expanding access to financing. Apart from that, increasing the capacity of MSMEs with export potential to reach global markets is carried out through facilities for MSME participation in trade promotions and MSME business meetings with potential buyers from within and outside the country. Expanding the accessibility of MSMEs to financing will encourage the achievement of inclusive economic growth. The positive relationship between the level of accessibility of MSMEs to financial institutions, not only on economic growth but also job creation, as well as the effectiveness of the transmission of a country's macroeconomic policies, in this case, fiscal and monetary. However, compared to large-scale business actors, MSMEs tend to rely on personal funds they own or through informal financing to start and run a business. The results align with research by Ismail et al. (2020), which states that an eco-friendly

digital marketing strategy is inseparable from the constraints on MSMEs' access to formal financing, especially in low-income countries. Various fundamental problems from both the supply and demand sides in MSMEs are challenging to increase the accessibility of MSMEs to formal financing. In Indonesia, most initial capital for establishing micro and small businesses in all business sectors comes from personal wealth. In terms of requiring additional financing support, individual sources of financing are more of a priority for MSMEs compared to sources of funding from banks or non-bank financial institutions.

5. Conclusions

Efforts to transform eco-friendly digital-based MSMEs marketing strategies to support strong, distribution and inclusive economic growth require integrated policy synergies across sectors, central and regional. Facing global economic challenges, efforts to strengthen the role and resilience of MSMEs are increasingly relevant to support strong economic growth. In the long term, gradually increasing the capacity of MSMEs will also support transforming Indonesia into a developed country. Strengthening MSMEs will also indirectly support realizing an inclusive economy and finance because of their wider accessibility to formal financial institutions. In addition, the rapid development of information technology demands a policy response to changes in the behaviour of economic agents, including MSMEs, in line with the increasingly rapid penetration of the digital economy and finance in Indonesia. The above fundamental changes in

the economic landscape require a holistic policy response aimed at the same goal: to support the improvement of people's welfare and Indonesia's transition to becoming a developed country. In the future, optimizing the role of MSMEs as the backbone of the economy will continue to be directed at efforts to increase productivity, inclusive economic growth, and adapt to the transformation of eco-friendly digital marketing strategies. The role of MSMEs as a new force in the national economy is increasingly relevant, with many countries starting to rely on domestic sources of economic growth, including through MSMEs.

MSME development is directed at maintaining resilience and encouraging increased contribution to the national economy in the long term. Priorities for strengthening MSMEs can be directed at priority sectors that have export potential and encourage tourism, as well as supporting the supply and distribution of strategic food commodities to support economic growth and reduce the current account deficit. This prioritization step is intended to support inter-sectoral and inter-regional integration through harmonious policy and program synergy with the Government to produce superior MSMEs at the national level. Policy synergy to promote MSMEs as a source of economic recovery in the eco-friendly digital era will continue to be strengthened. Efforts to encourage economic digitalization will be supported by success in encouraging national MSMEs to take advantage of the opportunities and benefits of the digitalization trend. MSME business processes must also transform to be better prepared to adapt to the new normal era ("New eco-friendly digital MSMEs"). Accelerating eco-friendly digitalization is a solution to raise the new level of Indonesian MSMEs through expanding market access, financing and supply chain networks. A structured and systematic cooperation program between stakeholders will be directed at expanding MSME access to financial institutions (fintech), marketplaces, and QRIS (QR Code Indonesian Standard) digital payments.

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