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DIGITAL TRANSFORMATION OF MSMEs IN INDONESIA DURING THE PANDEMIC\*

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**Abstract.** Digital transformation is a new trend in Industrial Era 4.0, leading to a new business pattern called the digital economy exacerbated by the crisis due to the Covid-19 pandemic. However, Indonesian Micro, Small, and Medium Enterprises (MSMEs) actors face obstacles in carrying out the business transformation process, as 90% of Indonesian MSMEs are still run conventionally. Therefore, the problem regarding resource unreadiness became the background of this research. This research aimed to find out the following aspects of MSME actors: (1) innovation priority during the Covid-19 pandemic, (2) acceptance of e-commerce, (3) levels of technology adoption, (4) difficulty levels in changing and adapting to technology, and (5) digital transformation in developing businesses due to the Covid-19 pandemic. This research employed a descriptive-quantitative approach in which the data were collected by distributing questionnaires to MSME actors in several cities in Indonesia. The results showed that (1) marketing innovation is the priority of MSMEs, (2) the majority of MSME actors are very receptive to the e-commerce, (3) the digital technology of e-commerce is major needed in MSMEs, (4) MSME actors find difficulties and obstacles in adaptation process, and (5) the combination of offline and online marketing methods became MSME actors' choice as a survival strategy during the Covid-19 pandemic.

**Keywords:** digital transformation management; e-commerce; MSME; pandemic

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1. Introduction

Industrial Era 4.0 brings the trend of digital transformation. The sustainability of a country’s economy is required to answer the challenges in the globalization era and the rapid flow of information (Javaria, Masood, & Garcia, 2020). This trend triggers innovation, productivity, efficiency, and community welfare through increased access to information, knowledge, and data (OECD, 2017). The massive turnover of human labor into machines or process automation has become a global megatrend (United Nations, 2017). The phenomenon of a new technology called the internet has become a dominant parameter in this era (Webster, 1995). The internet is a widespread information infrastructure that influences digital transformation most, especially in the sustainability of the digital economy.

The concept of the digital economy is understood and applied in the form of a new business model based on information technology via the internet. The consistency of the digital economy can be reflected in the competition of large industries utilizing information technology. The trade war between major industries in America (Microsoft, Apple, Amazon, Facebook, and such the like) and major industries in Asia (Alibaba, Samsung, Weibo, Grab, and Gojek) is increasingly getting inevitable (UNCTAD, 2019). Competition in technology and information also affects the level of competition in ASEAN, including Indonesia. According to the data, there have been 125,000 new internet users in ASEAN (Mahmood, 2018). As a result, ± 160 million Indonesian people are influenced by the digital transformation trend, 124% of which access via mobile devices (We Are Social, 2020).

Digital transformation is an inseparable part of regional connectivity efforts. The availability of information strongly supports the sustainability of the digital transformation in the economic sector that involves the main business, organizational structure, and management concept of a business entity (Suryani & Pirezada, 2018). In its development, business actors need to integrate coordination, priority, and implementation as a whole (Rados, Simic, & Misevic, 2019). Connectivity plays a role in encouraging the cooperation of various parties in economic growth through the digital economy (UN ESCAP, 2019). Digital connectivity can also improve the quality of human resources with high technological, information, and communication competencies (see Figure 1).

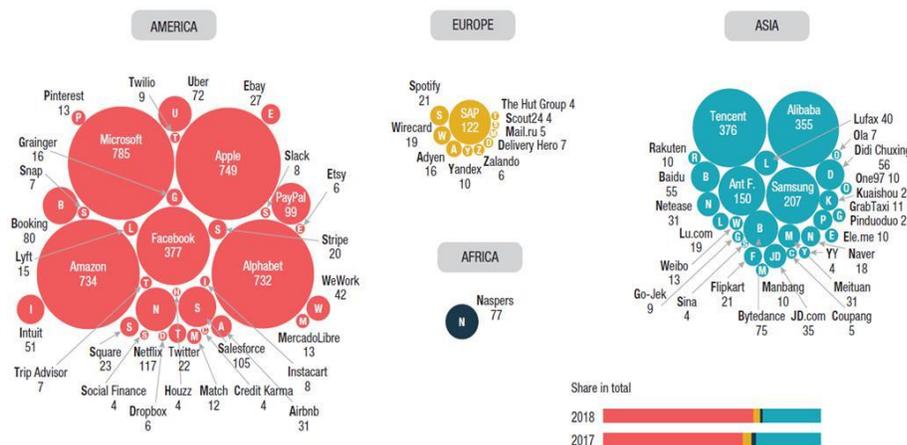


Figure 1. Distribution of Giant Industries in the Information-Based World  
Source: (UNCTAD, 2019)

This trend is a stimulant for forming a new business model, better known as the digital economy (Mahmood, 2018). The demand for the digital economy has been stimulated by the Covid-19 pandemic hitting Indonesia since the end of 2019. Covid-19 has affected all sectors of human life, including the economic sector run by Micro, Small, and Medium Enterprises (MSMEs). Therefore, changes in patterns in the economy are required to adapt to this condition to achieve a sustainable economy. In addition, various government policies to suppress the spread of the virus such as social distancing, large-scale social restriction (*Pembatasan Sosial Berskala Besar – PSBB*), work from home (WFH), and others have affected the movement of MSMEs (Hamid, 2020). In all the limited conditions, digital technology is considered to be the best solution in maintaining the economy (Wijoyo & Widiyanti, 2020).

The digital business model provides an opportunity for economic actors to grow well. This digital transformation process brings organizational structural changes to be more integrated through the help of digital technology (Shevyakova et al., 2021). With digital transformation, business entities are expected to adapt to this current condition more quickly and maintain their businesses (Javaria et al., 2020; Rados et al., 2019; Shevyakova et al., 2021).

However, the business structure in Indonesia is different from that in developed countries. About 99.99% of Indonesia's economy is dominated by the MSME sector, not large industries as in developed countries (Saputra & Herlina, 2021). The lower quality human resources, facilities, and infrastructure in Indonesia also hinder economic growth (Kurniawati, Al Siddiq, & Idris, 2020) and (Pirzada, 2016). In the current Industrial Era 4.0, 90% of Indonesia's MSMEs are still run conventionally because MSME actors find the transition from offline to online not easy (Kurniawati & Siddiq, 2020).

In response to this, the Ministry of Cooperatives and SMEs of the Republic of Indonesia has prepared several strategic measures to increase the competitiveness of SMEs and cooperatives for sustainable and independent business and economic growth. In the 2020-2024 Medium-Term National Development Plan (Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024) (“Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024,” n.d.), the policies are expected to encourage the use of technology for MSMEs. Moreover, MSMEs are expected to collaborate to innovate to produce products with added values and provide integrated and real-time information (Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2019).

Based on the above problems, we were interested in and challenged to conduct a study to examine the following aspects of MSME actors during the Covid-19 pandemic: (1) innovation priority during the Covid-19 pandemic, (2) acceptance of e-commerce, (3) levels of technology adoption, (4) difficulty levels in changing and adapting to technology, and (5) digital transformation in developing businesses due to the Covid-19 pandemic.

## **2. Materials and Methods**

The study was quantitative descriptive, and it explained the research findings specifically without correlating one variable with other variables (Neuman, 2013). The data were collected using questionnaires distributed to MSME actors in Indonesia. The objects of this research are MSMEs in Indonesia, including Surabaya, Sidoarjo, Malang, and several other areas. The instruments used in this research were questionnaires and observation guidelines.

Primary data are obtained directly through observations and questionnaires (Sugiyono, 2012). The primary data in this research were related to the digital transformation, digital model development, and creative and innovative measures taken by MSME actors in developing their businesses. After the data collection, the following process was editing, coding, and tabulating the data. Meanwhile, the secondary data of this research were obtained from the Department of Cooperatives and MSMEs and the Medium-Term National Development Plan (Rencana

Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024) (“Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024,” n.d.). The data collected were analyzed using quantitative-descriptive data analysis using the scoring method and presented in tables, graphs, pictures, and descriptions.

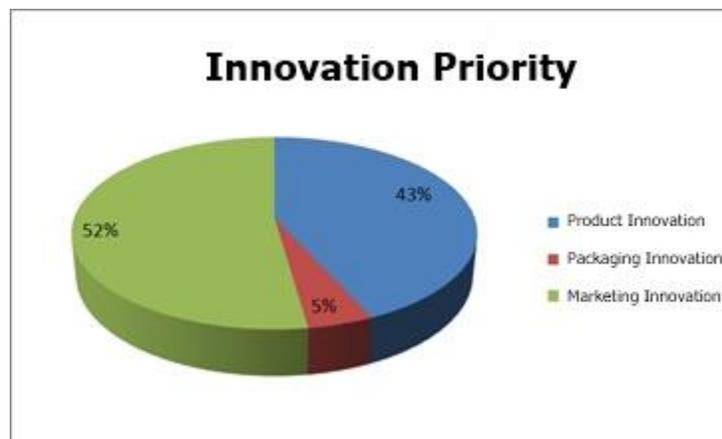
### 3. Results

#### 3.1 MSME Actors’ Innovation Priority in Dealing with the Covid-19 Pandemic

Micro, Small, and Medium Enterprises (MSMEs) are integral parts of economic activities existing in the community. In terms of quality, MSMEs dominates the business sector in Indonesia (99.9%). The world economy is also dominated by MSMEs (up to 90%) (Kurniawati, 2020). Its growth always increases drastically every year (Wahyuni, Irwansyah, & Aprilia, 2019). The small amount of capital needed by MSMEs makes this business sector survive and continue to grow (Kurniawati, Chrissendy, & Saputra, 2019). In 2015, there were 55.2 million MSMEs in Indonesia, and this number continues to grow from year to year (Badan Pusat Statistik Jawa Timur, 2017).

The growth of MSMEs is directly proportional to the increase in MSME contribution to state revenues. For example, in 2016, MSME contributed IDR 7,009,283 billion (59.84% per year) to the GDP of Indonesia, and it increased to IDR 7,704,635.9 billion (60%) in 2017 (Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2017). It confirms that MSMEs become a business sector contributing the largest to the GDP and are very strategic to be developed (Pirzada et al. 2015).

It reflects that Indonesia has an enormous potential to develop technology-based MSMEs and a creative economy that relies on renewable resources (including ideas, creativity, and innovation from human resources) and is based on the use of science, technology, and cultural heritage. Development is the originality of things which are utilized by end clients which was initially utilized in business area associations (Asmara & Rahayu, 2020). This development is intended to encourage economic growth. In this regard, an innovative approach is needed to create new businesses to develop and deal with the existing challenges and competitions (Jong & Wennekers, 2008). Without innovations, companies will not be able to survive (Baldacchino & Bertram, 2009).



**Figure 2.** Respondents’ Innovation Priority Levels

Based on Figure 2 above, in terms of innovation priority, 52.3% of the total 44 respondents were included in the marketing category, 43.2% were included in the product marketing category, and the rest 4.5% were included in the packaging category. Most MSMEs prioritize marketing innovation to maintain their business existence and increasing corporate profits. Marketing is a managerial process making individuals or groups achieve what they want and need (Anugrah, 2020).

An effective progress to Industry 4.0 in the coming years will decide the seriousness and future practicality of MSMEs. Innovative freedoms for connecting offices, information and cycles offer the two chances to work on the proficiency of mechanical cycles and productive potential for growing new plans of action. This will reform items and creation, yet in addition mechanical worth creation. It is normal that Industry 4.0 will help both enormous organizations and little and medium-sized ventures (SMEs). Simultaneously, Industry 4.0 is changing the universe of work in a practical manner. Expanding systems administration, adaptability and intricacy of cycles are setting new requests on the abilities of organizations and their workers. Likewise, Industry 4.0 is likewise changing the constructions and types of association inside organizations and the plan of work environments. Nonetheless, advanced change doesn't follow a deterministic example, however, can and ought to be molded. There are a wide range of advancement situations that rely upon the collaboration between innovation, individuals and the association and are controlled by choices at the degree of functional, corporate procedure and work arrangements, as well as the common structure conditions (Shevyakova et al., 2021).

The rapid advancement of technology that is happening today causes perpetrators to businesses must make adjustments quickly, both in terms of terms of strategy and objectives. With new technology, of course, providing great impact on business people. Product approach can be done easily and quickly to consumers. Digital technology is used as a means to market and sell products. Marketing is a managerial and process by which individuals or groups obtain what is wanted and needed by creating, offering, and exchanging products of value to other parties or activities relating to the delivery of products or services from the producer to the with consumers. The goal of this marketing is to attract new customers by promising superior value, setting attractive prices, distribute products or services easily, promote effectively as well as retaining existing customers while still holding on to the principle of customer satisfaction (Saifuddin, 2013). Marketing includes activities related to selling, advertising, promotion, and pricing.

Business actors believe that the use of digital media, especially for trade online, will provide many benefits (Baase, 2008). Client Global Insights (CGI), which is an international business and IT consulting company, illustrates the benefits of digitization in all business lines from raw material management, suppliers, transportation, manufacturing, distribution (CGI, 2017). Digitizing the company with technology integration will optimize the production floor (Prasetyo, 2020). It also changes the way products are produced and marketed (Bédard-Maltais, 2017). Marketing with digital technology costs less than conventional methods (Hood, Brandy, & Dhanasri, 2016). A study shows that digitizing the business lines of small and medium-sized companies can increase efficiency by an average of 3.3% per year (Koch, Kuge, Geissbauer, & Schrauf, 2014). Efficiency is achieved by reducing the company's operating costs (Bédard-Maltais, 2017; CGI, 2017; Hood et al., 2016; Koch et al., 2014).

### *3.2 MSME Actors' Acceptance of E-Commerce*

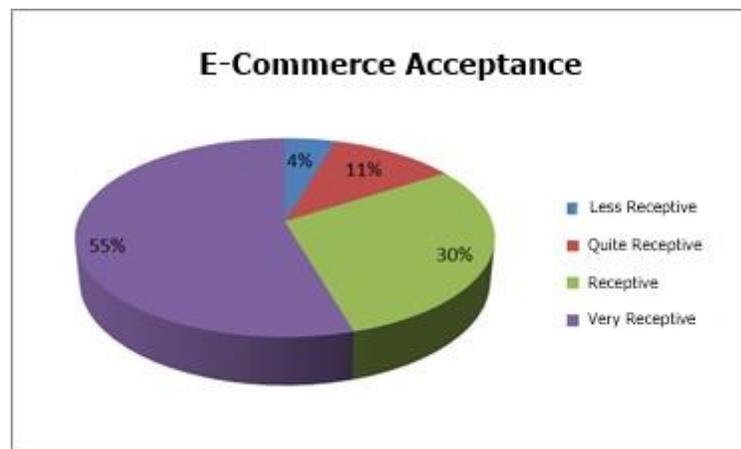
E-commerce is one of the trends and phenomena developing in the broader community due to technological advancement. This trend brings changes in behavior patterns, both for entrepreneurs and consumers (Kala'lembang, 2020). The immense opportunity and benefit that MSME actors can achieve in applying e-commerce have become pros and cons. It is significant for the E-retailers to keep up with client repurchase goal and support tasks to acquire serious advantage on the lookout. In a web based business world it is significant for the specialist co-op to draw in with clients and give them security from every one of the dangers looked by online

purchasers. (Hong et al., 2010)) and(Cunningham, Gerlach, Harper, & Young, 2005) inspected the effect on the reception of the buy through the Internet also, have illustrated them as: monetary danger, practical, social and actual climate, fusing the fifth measurement of this particular deals framework, the danger of protection.

Today's technological advances, the use of the internet is increasing soar. In particular, the millennials who can't even leaving digital technology every day, whether it's to fulfill daily needs to doing business activities (Pestean, 2021). Right now, you can encounter people doing various businesses on social media. Start from selling equipment, cellphone accessories, to various equipment for beauty. Some people can already take advantage of digital technology to survive with the business. However, not a few people too who do not understand the benefits of digital technology (Anugrah, 2020).

Running a business is certainly not going to be as easy as turning it around hand. Various risks and threats await every day (Husaini, Pirzada, Saiful, 2020). With the development of technology in the digital era, more and more e-commerce emerging in Indonesia. E-commerce is a buying and selling platform that can be accessed by the public using digital technology Of course, this is a threat to MSME businesses in Indonesia. In addition to e-commerce can make buying and selling activities easier, e-commerce also offers various product categories to its customers. This matter make people more interested in shopping through e-commerce instead of having to go around looking for the desired product drains energy even more (Anugrah, 2020).

This demands a change in the perspective of MSME actors towards shifting consumer patterns. Consumers are getting used to make decisions based on digital content and make online purchases of goods (Victor, Fekete Farkas, & Lakner, 2019). This is a challenge but also a promising business opportunity for MSMEs in Indonesia. Based on this, there is a strategy for developing the digitization of MSMEs to support the development of MSMEs and as input for MSME actors (Wijoyo & Widiyanti, 2020).



**Figure 3.** Respondents' E-Commerce Acceptance Levels

Based on Figure 3 above, 54.5% of the total respondents showed a very high level of e-commerce acceptance, 29.5% had a high level of e-commerce acceptance, and 11.4% had a medium level of e-commerce acceptance. Meanwhile, the rest 4.5% of respondents showed a low level of e-commerce acceptance.

In other words, most MSMEs in Indonesia accepted e-commerce well in developing their businesses. The high e-commerce acceptance level is influenced by the significant impact and benefits of e-commerce on business continuity (Argilés-Bosch, Ravenda, & Garcia-Blandón, 2020). With the idea of digital actual frameworks in

Industry Revolution 4.0, everything is about innovation and it permits the two different ways of correspondences among human and innovation (Teh & Kee, 2019). MSME actors find many conveniences and increase in the competitiveness of their products or services. E-commerce helps MSMEs sell various products and services physically or digitally easily (Lin, Li, Luo, & Benitez, 2020).

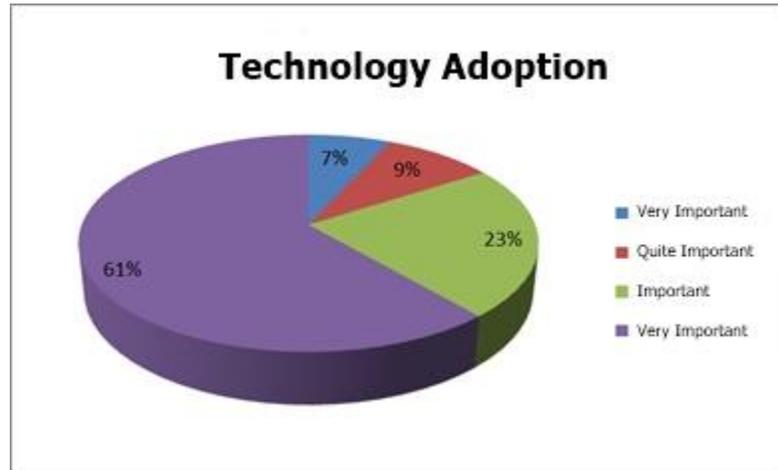
Furthermore, in the current industrial era, 90% of Indonesia's MSMEs are still run conventionally. MSME actors find the transition from offline to online uneasy (Kurniawati & Siddiq, 2020). In response to this, the Ministry of Cooperatives and SMEs of the Republic of Indonesia has prepared several strategic measures to increase the competitiveness of SMEs and cooperatives for sustainable and independent business and economic growth. In the 2020-2024 Medium-Term National Development Plan (Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024) ("Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024," n.d.), the policies are expected to encourage the use of technology for MSMEs. Moreover, MSMEs are expected to collaborate to innovate to produce products with added values and provide integrated and real-time information (Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2019).

The government continues to encourage the use of digital technology to improve productivity and added value of SMEs (Ministry of Communication and Information Technology, 2020). Based on the *Badan Pusat Statistik* (BPS) until 2018 the total MSME units totaling 64.2 million throughout Indonesia. In 2020 Ministry Communication and Informatics (Kominfo) has recorded as many as 9.4 million MSMEs have gone online in marketing their products. That means it's still there around 54.8 million MSMEs who have not been able to take advantage of online media to market their products. The perpetrators As many as 59.2 million MSMEs, 8 percent (3.79 million) have used online platforms in market their products by surfing in cyberspace, this is expected to accelerate transformation of SMEs in Indonesia to digital (Musfiroh, Sabrina, & Wuragil, 2017).

### *3.3 MSME Actors' Technological Adoption Level in Developing Their Business Due to the Covid-19 Pandemic*

Technology has a significant role in the progress of a business entity, including MSMEs. One of the technologies that can help the development of MSMEs is e-commerce. E-commerce was born from technological developments increasingly rushing combined with economic growth (Palinggi & Limbongan, 2020). The adoption of e-commerce highly depends on the decision of MSME owners (Kurniawati & Setiawan, 2019).

The digital economy concept is an economic development that began to be widely recognized in the 21st century and continues to grow along with the rapid transformation of information technology in society (Gaffar, Rahayu, Adi Wibowo, & Tjahjono, 2021). This term is also developing as technology and communication continue to transform rapidly, influencing the efficiency and productivity in every economic activity. One of the advantages of the digital economy is cross-border transactions through digital platforms—the process allows for a global transaction. This transformation begins with an idea, innovative thinking, and technology adoption (Lopez-Gonzalez & Box, 2017). In this concept, the public can access information technology via the internet (G20 - China 2016, 2016).



**Figure 4.** Respondents' Technological Adoption Levels

Figure 4 shows that 61.4% of the total respondents considered technological adoption to be very important, 22.7% considered it important, and 9.1% considered it quite important—meanwhile, the rest, 6.8%, considered technological adoption to be less important.

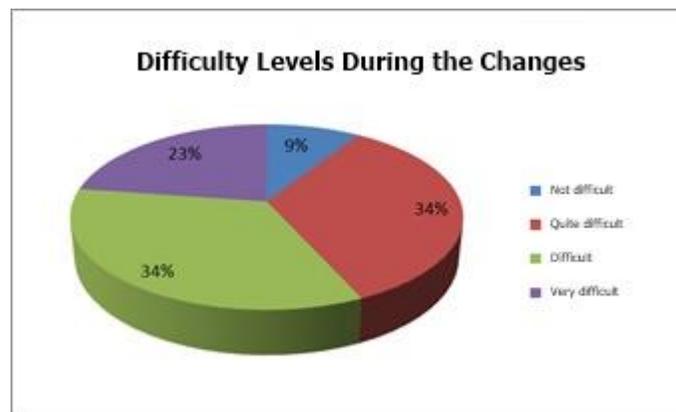
The majority of MSME actors have realized that technology is a major need in business development. The readiness of MSMEs in adopting e-commerce technology depends on the conditions of the MSME itself, including human resources, finance, and infrastructure. These factors can influence MSME actors to make the right decisions in implementing technology in their organizations (Fardani & Surendro, 2011). On the other hand, the adoption of e-commerce technology is also the impact of the Covid-19 pandemic; this pandemic triggers Indonesia MSMEs to adopt e-commerce technology (Lin et al., 2020). As we know, during the pandemic, the government has issued social restriction rules to reduce the spread of the Covid-19 virus (Hamid, 2020).

Online marketing during the pandemic has had a very positive impact on MSMEs. In addition to developing businesses, MSME actors can also analyze the strategy taken to deal with its competitors. It can even increase sales of the products they sell. Currently, here are many companies that choose online media as their method the marketing. Some of the media that are often used are Facebook, Twitter, Instagram, and others. By using this medium companies will be able to reach their target market. Some features have been provided in the media, ranging from service providers, needs, daily, as well as up-to-date information across the country (Anugrah, 2020).

Adoption of technology such as making Android-Based MSME Product Marketing Applications as a Strategy to Improve the Indonesian Economy. From research results, this concept of E-UMKM is a new breakthrough for marketing products SMEs in penetrating the ASEAN free market. With the existence of E-UMKM is expected to help MSME producers in Indonesia in market their products not only domestically but up to overseas. With the implementation of the rules regarding PSBB, business people MSMEs, of course, also have their own problems to market their products. With the concept of online marketing in the form of applications, the android can make it easier for MSME business people to achieve their target market share. Viewed from the side consumers, the concept of E-MSMEs also makes it easier for consumers to find the product they need, more practical, and of course not requires a lot of energy.

*3.4 MSME Actors' Difficulty Level During Technological Changes and Adaptation Due to the Covid-19 Pandemic*

The process of adopting and implementing new technologies, such as e-commerce, has its impact. Therefore, the adaptation process is fundamental in determining the level of success. In this transition, MSME actors may find difficulties and obstacles. Figure 4 below shows that 34.1% of the total respondents found the technological changes and adaption complicated and quite complicated. Meanwhile, the other 22.7% found it very difficult, and the rest, 9.1%, encountered no difficulties.



**Figure 4.** Respondents' Difficulty Levels During Technological Changes and Adaption

The transformation process did not well as expected by MSME actors. There is a polemic between perception and competence towards mastery of technology. The business structure of MSMEs in Indonesia is different from that in developed countries. Problems regarding human resources, facilities, and infrastructure cause this opportunity to be suboptimal in implementation in Indonesia (Kurniawati et al., 2020). The greater part of the world's organizations see Industry 4.0 as a chance. Simultaneously, there are as yet many inquiries concerning its execution. MSME undertakings, specifically, are substantially more wary about the conceivable outcomes of the fourth modern transformation than huge organizations and, contrasted with them, have a more noteworthy need to create - both to carry out Industry 4.0 and to work on the abilities of their representatives (Kwilinski, Vyshnevskiy, & Dzwigol, 2020).

The 4.0 industrial is likewise prompting manageable changes in the realm of work. The new level of adaptability and advanced organizations require creative capability arrangements that are accessible relying upon the circumstance and make the conduct of self-governing digital actual frameworks straightforward to people. Specifically, little is thought at this point about the requirements of MSME endeavors (Shevyakova et al., 2021). What's more, there is an absence of reasonable capability proposition that would plan both experienced workers and novices to the calling explicitly for Industry 4.0. Moreover, Wijoyo & Widiyanti (2020) revealed several obstacles, such as the consumers' lack of knowledge of technology and poor telecommunication infrastructure. Besides, internally, the unreadiness of MSME human resources (employers and workers) in using online methods and the lack of knowledge of online business also hindered the process (Yunus & Wahob, 2021). These require human resource quality improvement and education on the digitalization strategy.

National industry players need to improve a lot, especially in the aspects of implementation and mastery of technology which are the key determinants of company competitiveness (Satya, 2018). The central government through the Indonesian Ministry of Industry has tried to adapt to this change by launching the national agenda

Making Indonesia 4.0 (Dhahir, 2020). Various digital technologies will be developed, such as artificial intelligence (AI), Internet of Things (IoT), wearables, robotics, and 3D printing (Ministry of Industry, Republic of Indonesia 2018). Not only the central government, but local governments also need to think about creating activities that can accelerate digital transformation, especially for Small and Medium Industry business actors. Local government activities in the context of digitalization should be directed to eliminate obstacles that arise in the implementation phase.

Moreover, governments play a role in accelerating the digital transformation of Small and Medium Industries by creating activities aimed at eliminating obstacles that arise in the implementation of digitalization. The alternative activities that can be carried out by the Government are digital literacy education for MSMEs, training and education e-commerce assistance for MSMEs, optimizing the role of UPL-UMKM, expanding the internet network. These activities are carried out by the Department of Industry and Trade and the Office of Communication and Information Technology in accordance with their main duties and functions (Prasetyo, 2020).

In response to this, the Ministry of Cooperatives and SMEs of the Republic of Indonesia has prepared several strategic measures to increase the competitiveness of SMEs and cooperatives for sustainable and independent business and economic growth. In the 2020-2024 Medium-Term National Development Plan (*Rencana Pembangunan Jangka Menengah – RJPM*), the policies are expected to encourage the use of technology for MSMEs. Furthermore, MSMEs are expected to collaborate to innovate to produce products with added values and provide integrated and real-time information (Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2019).

In addition, during the implementation of the PSBB, the Minister of Cooperatives and SMEs prepared 8 special programs for reduce the impact of covid-19 for the cooperative sector and MSMEs. Among others:

1. Proposing a stimulus for the purchasing power of MSME and cooperative products.
2. Support and make social distancing effective but in time. At the same time, the shops can run their business well.
3. Restructuring program and interest rate subsidy for micro business loans.
4. Special credit restructuring for cooperatives through LPDB KUMKM.
5. Encouraging the provision of masks for medical personnel and the general public.
6. Include micro sectors in the pre-employment card recipient cluster for day worker.
7. Direct cash assistance.
8. Propose Pph 21, import income tax, Pph 25, restitution value added can be relaxed for KUMKM.

With a special program from the Minister of Cooperatives and SMEs, it is hoped that KUMKM actors can bring a positive economic impact. Business actors can take advantage of the program and minimize the impact of PSBB (*Pembatasan Sosial Berskala Besar*) (Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2019)

### *3.5 Digital Transformation Carried Out by MSME Actors in Developing Their Business due to the Covid-19 Pandemic*

Technological advances require business actors to make adjustments quickly and precisely. To achieve this goal, business actors need several approaches, one of which is the product approach. Digital technology can market and sell products to make the process run efficiently and quickly (Anugrah, 2020). Digital transformation implicates stages in technology adoption. One of the digital transformations conducted by MSMEs is reflected in the changes in marketing patterns. Most MSMEs choose to make changes in marketing as a strategy to survive in business competition (Slamet et al., 2016).

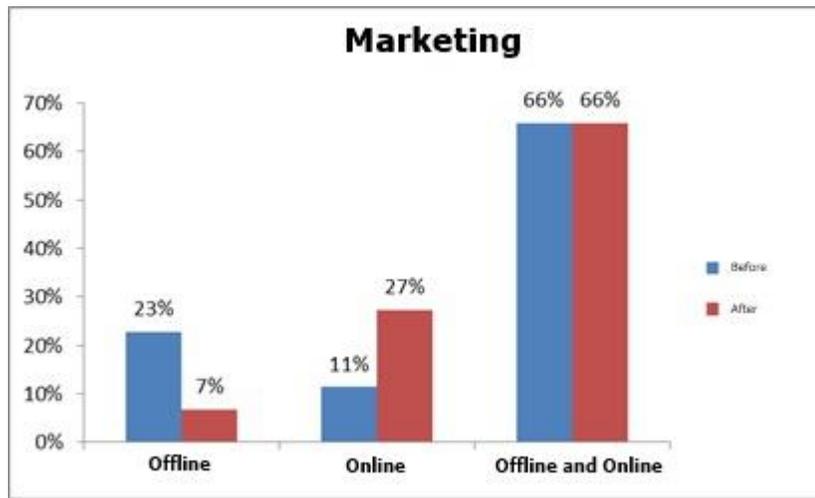


Figure 5. Respondents' Marketing Methods

Figure 5 shows that 66% of respondents carried out the offline and online marketing method before and after the Covid-19 pandemic of the total 44 respondents. Meanwhile, those who carried out the offline marketing method reached 23% before the Covid-19 pandemic and 7% after the Covid-19 pandemic. 11% of the respondents applied online marketing before the Covid-19 pandemic and 27% after the Covid-19 pandemic.

The combination of offline and online marketing methods remains the choice of Indonesia MSME actors as a survival strategy during the Covid-19 pandemic. The large-scale social restriction in various areas during the pandemic has forced MSME actors to change their marketing patterns to run online. Online marketing strategies affect the increase in MSME profits. Findings showed that the Covid-19 pandemic situation provided challenges and opportunities for MSME actors in Indonesia. Online marketing strategies applied by MSME actors during the large-scale social restriction period due to the Covid-19 pandemic are considered highly effective (Anugrah, 2020).

Digital transformation is an absolute movement for MSMEs to survive during the Covid-19 pandemic following changes in consumer patterns that were increasingly accustomed to using online media as a means of making decisions and purchasing goods. Thus, this momentum creates opportunities for MSME actors to carry out transformation (Wijoyo & Widiyanti, 2020). This is in line with research conducted by (Saputra & Herlina, 2021) that stated the outcome clarified that business strength is impacted emphatically, straightforwardly, and fundamentally by business adaptability and work environment otherworldliness. Business adaptability is affected by working environment otherworldliness, favorable to social administration, furthermore, collusion ability. Supportive of social authority of proprietors as well as directors impacts execution of wellbeing convention furthermore, collusion ability.

The application of the digital economy is required to accelerate economic development. Connectivity plays an essential role in maintaining the alignment of levels of economic development with its three domains: physical development, information, and financial flows (CIGA, 2018). Connectivity can increase the effectiveness of a network facilitating the exchange of goods, services, community mobility, and knowledge (Vineles, 2017). Also, connectivity can develop network collectivity that eventually increases and accelerates economic growth. MSME connectivity can be a major instrument in developing individuals, groups, the private sector, and the public sector.

Moreover, online marketing as the application of digital economy is any activity that concerning the marketing activities of a product or service by using or through online media. Online marketing can make it easier for business people to increase profits, but marketing cannot avoid the three components that always accompany, namely competitors, consumers and companies (Saifuddin, 2020). Business people who understand benefits of online marketing will use it to communicate, find customers, and sell their products.

### Conclusions

This research concludes that marketing innovation is the priority used by MSME actors as a strategy to survive during the Covid-19 pandemic. The majority of Indonesia MSMEs are very receptive to the application of e-commerce in developing their businesses. MSME actors have realized that technology is a major need in business development in the current digital era. However, most MSME actors find this technological transformation difficult. MSME actors combine online and offline marketing methods to survive during the Covid-19 pandemic to achieve the effectiveness of the transformation process.

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