

Research Article

The Role of SMEs in Indonesian E-Commerce to the Indonesian Economy during the Covid-19 Pandemic

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Abstract

Globalization and technological advancements increasingly provide a fresh approach for economic growth through economic digitalisation, one of which is the e-commerce business. In this study, the authors state that digitalisation in trade has had a positive impact on the growth of SMEs in Indonesia, which has contributed to the country's economic climate. As a result, the authors attempt to explain the role of SMEs through Indonesian e-commerce and how they affected the Indonesian economy during the Covid-19 pandemic through a qualitative research. The authors chose the Covid-19 pandemic as a time period for this research as the growth of SMEs through the e-commerce business experienced significant growth during the pandemic. This growth was primarily caused by the ongoing pandemic conditions, which rendered traditional economic activities impossible. Finally, the role of SMEs in e-commerce contributed positively to the Indonesian economy during the Covid-19 pandemic.

Keywords: e-commerce; Indonesia; SMEs

Introduction

The purpose of this study is to discuss how the role of SMEs through Indonesian e-commerce affected the Indonesian economy during the Covid-19 pandemic. This study is necessary to discuss because many countries, including Indonesia, have experienced economic decline during the Covid-19 pandemic, which has been ongoing since 2019. The Indonesian economy suffered the most from the Covid-19 pandemic particularly in 2020. In that year, the increase in daily cases of Covid-19 and the implementation of the Government of Indonesia's policy of restricting community activities (PPKM) caused a decline and a blow to the Indonesian economy (Andrianto, 2022), with a -5.32% decrease in economic growth compared to 2019 (Sasongko, 2020).

The economic impact of the Covid-19 pandemic staggered not only Indonesia, but the entire world. The Indonesian government continues to pursue various policies and international cooperation to restore health and welfare in order to rebuild the nation's economy. One of these efforts is to encourage the movement of SMEs through the use of digital platforms. SMEs doing business on digital platforms have been shown to help save the global economy during a pandemic (CWTS, 2022). According to the United Nations Conference on Trade and Development (UNCTAD), e-commerce transactions have increased from 14 percent in 2019 to 17 percent in 2020. (UNCTAD, 2021). This condition confirms that the economy's shape and adaptation have changed between before and during the pandemic. Whereas, during the Covid-19 pandemic, a new type of

economy, namely the digital economy, grew through e-commerce and provided a way out for the Indonesian economy's crisis decline.

With the advancement of globalization and technology, the lifestyle and characteristics of human life, including business, have shifted. Traditional business activities are for example, door-to-door trade, brick-and-mortar store, and face-to-face or mouth-to-mouth offer. However, the development of globalization has changed the way the economy operates, encouraging technological developments that impacted the digitalization of the economy. Digitization is defined as the economic and social transformation triggered by the massive adoption of digital technologies to generate, process, share and transact information (Sharma & Sharma, 2021). Meanwhile, economic digitization is defined as the rapid development of business or trade transactions using internet services as a medium for communicating, and collaborating between companies or individuals in the future (Sayekti, 2018). One of the consequences of today's economic digitalization is the emergence of digital platforms as industrial platforms for marketing products. E-commerce is one of the most rapidly expanding digital platforms. Whereas the growth of e-commerce allows developing countries to gain a stronger foothold in the multilateral trading system and contribute to increased trade profits.

Indonesia is one of the countries with a relatively large potential for economic digitization. This is because Indonesia has the world's fourth largest number of internet users, following China, India, and the United States. The number of internet users in Indonesia continues to rise, and is expected to reach 202.35 million in 2021, an increase of 11% from 2020. Furthermore, McKinsey & Company argued that economic digitization will accelerate in Indonesia (McKinsey & Co., 2018), increasing the income for small and medium-sized enterprises (SMEs) by up to 80% (Puslitbang Aptika & IKP, 2019) because SMEs are one of the sectors in Indonesia that play an important role and contribute positively to the Indonesian economy (BKPM, 2021).

As one of the existing online platforms, e-commerce enables SMEs to trade their products during the Covid-19 pandemic. This condition essentially supports the trend of an increasing number of Indonesian SMEs turning to online platforms such as e-commerce. This is proved by the fact that SMEs experienced growth both before and during the pandemic, with growth exceeding twofold (Setyowati, 2021). This phenomenon captivated the author's interest, prompting them to conduct additional research. The study intends to focus on the impact of SMEs through e-commerce on the Indonesian economy, particularly during the Covid-19 pandemic. In emphasizing their study, the authors will study the development and impact of SMEs prior to and during the Covid-19 pandemic, in addition to the contribution of SMEs to the Indonesian economy through the digital economy platform.

Literature Review

Prior to discussing previous studies, the authors will discuss the role of e-commerce in influencing the growth of SMEs, particularly during the Covid-19 pandemic in Indonesia. SMEs have essentially become one of the main pillars of the Indonesian economy, controlling for more than 60% of the total GDP in 2020. Furthermore, one of the important roles of SMEs in the Indonesian economy is their ability to absorb a large number of workers (Nurhaliza, 2022). Indonesia's unique characteristic as one of the Global South countries is significant SME growth, that is heavily influenced by the economic climate designed by the government to create many emerging SMEs (BKPM, 2021b).

The unavoidable pandemic situation is also a significant factor in the growth of SMEs in Indonesia. Due to the reduction of traditional economic transactions and restrictions on community activities, digital platforms have emerged as an alternative for economic turnover. This situation then creates conditions for the growth of SMEs in the Indonesian market through the use of e-commerce channels. Records from the Indonesian E-commerce Association (idEA) show that 9.9 million SMEs joined digital platforms during the pandemic from May 2020 to February 2022 (Setyowati, 2022). From this situation, we can see that SMEs play an important role in the e-

commerce business, which ultimately provides the foundation for the Indonesian economy during the pandemic.

The authors acknowledge that numerous studies on the relationship between the digital economy and economic growth have been previously conducted. Aside from being used by the author as a justification to strengthen the arguments in the study, the authors will also draw on previous research to provide a new discussion. As a result, the authors will provide a brief description of several previous studies that have discussed the role of the digital economy in economic growth, followed by an explanation of how this research differs from previous research.

The first study, titled "Study of the Digital Economy in Indonesia," is by Permana & Puspitaningsih (2021). This study focused more on the development of Indonesia's growing digital economy, which is still growing. This study's discussion is based on a descriptive explanation of the impact of the digital economy on the Indonesian economy, particularly in 2018-2019. This study concludes that the digital economy continues to contribute positively to the national economy. However, the authors can conclude that the weakness of this research is the lack of a conceptual foundation as the primary analytical tool in providing an argumentative presentation.

The second study is by Nasution et al. (2020), which aims to discuss the impact of e-commerce business transactions on Indonesia's economic growth in 2016-2017. This study's argument is that Indonesia has a very good rate of digital economic growth due to e-commerce, where a positive trend has been observed from 2007 to 2016. Nasution et al. (2020) describe their study by providing arguments based on a review of the Solow Growth Theory and Endogenous Growth Theory. The findings of this study indicate that the number of e-commerce transactions and internet users have a positive impact on Indonesia's economic growth.

The third research comes from Devi (2019), which seeks to discuss the digitalization of SMEs in the study of international relations by taking China as a case study. In this study, the author departs with the same arguments from several other authors, where globalization and technological developments provide a positive trend for the development of Chinese e-commerce. Devi (2019) provides her argument in this research focusing on the Economic Integration Theory. This study concludes that China, as a new economic power, has a solid foundation for sustaining its economic growth through the contribution of e-commerce. One way to conclude this research is to encourage the digitalisation of SMEs in China, which play an important role in contributing to China's economic growth.

The fourth study comes from Yuliani, (2019) that aims to discuss the growth of the digital economy in Indonesia and China in the e-commerce industry. This paper examines a comparative model of two countries, Indonesia and China. Yuliani (2019) is concerned with the characterization of each country's digital economic growth. This study concludes that Indonesia continues to face numerous barriers in digital economic growth, particularly in the e-commerce business. This is due to problems such as human resources, bureaucracy, and a variety of other factors that differ from China's growth conditions. The drawback of this paper is that Yuliani (2019) does not provide a clear argument and explanation for why the author chose the comparative model of China and Indonesia, which is unbalanced in many aspects.

From the data above we can see that e-commerce as one of the products of digitalization has a potential to contribute to economic growth through an enabling environment or interactions that can reach a wider and more distant market Armunanto, et al. (2021). E-commerce is also defined as a new engine for increasing economic growth because through e-commerce we can increase production productivity, expand market share and increase efficiency Armunanto, et al. (2021). Much research has been done about the relations between value transaction e-commerce and economic growth. Elsoud (2014) stated that value transaction e-commerce and economic growth in Saudi Arabia has positive relations. Qu & Chen (2014) also said in China value transaction e-commerce and economic growth has positive relations in China because e-commerce can reach a

wider market, increase the volume of trade (especially SMEs products), and provide a multiplier effect for other fields related to the digital economy.

From the discussion above, the authors will provide a study with a similar theme, but with a different focus of discussion that bases itself from the previous studies that have been conducted. If the studies Permana & Puspitaningsih (2021), Nasution et al. (2020), Devi (2019), and Yuliani (2019) attempted to explain the role of the digital economy in a country's economic growth, the authors will attempt to concentrate on the role of SMEs in the context of the "new economy" form of e-commerce in the Indonesian economy, particularly during the Covid-19 pandemic era. The authors believe that discussing the Covid-19 pandemic is an important issue to present, because it provides a foundation for understanding the impact of SMEs in e-commerce on the Indonesian economy. The authors will use an analysis of the concept of the digital economy as the main basis for their argument to explain further about the condition of SMEs before and during the pandemic in Indonesian e-commerce businesses. Furthermore, the authors will confirm which type of e-commerce will be discussed further in this study, which was not specifically described in the previous studies.

The Concept of Digital Economy

The authors will use the concept of the digital economy as the main basis for their study in analysing the discussion on the role of SMEs in e-commerce on the Indonesian economy during the Covid-19 pandemic. As we all know, the digital economy has had a significant impact on the pace of economic development and the growth of new forms of economy, such as e-commerce, which has had a positive impact on the Indonesian economy. In fact, the expanding digital economy serves as a foundation for bolstering market expansion and the trading economy (Moisseeva, 2015).

Don Tapscott (1996) was essentially the first to introduce the concept of the digital economy. Tapscott defines the digital economy as a socio-political situation and an economic system with intelligence space characteristics, such as information, and various access to instruments, capacities, and information order. It is clear that in the digital economy, geographical location is no longer an impediment to completing a transaction. The digital economy believes that the existence of a platform that can accommodate all existing systems will be a critical factor in the development of networks, the economy, and data use (Sugiarto, 2019).

The digital economy is a phenomenon that is still being discussed and is one of the most important topics to continue investigating, given that its annual growth rate is in the double digits worldwide. This growth is largely concentrated and continues to accelerate in the majority of Global South countries (WEF, 2015). The global economy and politics, combined with technological innovation and development, are the primary drivers of the emergence of this "new form." This has had an impact on the growth and development of "new forms" of the economy's face (Bukht & Heeks, 2017). Simultaneously, economic digitization, which presents a "new form and face" for the global economy, has proven to have altered the attainment of efficiency, effectiveness, and interconnection (Sugiarto, 2019).

The digital economy believes that changing the economy into a "new form" will benefit a country. There are at least four areas of influence. First, the digitalization of the economy, including e-commerce, will have a positive financial impact on a country's contribution to economic growth. Second, job opportunities, through the growth of SMEs in e-commerce, can provide a positive trend for job creation. Third, the advantages for buyers, where e-commerce usually provides advantages such as more affordable prices compared to direct purchases. Fourth, social equality, where the digital economy is believed to have an impact on strengthening gender equality, financial service inclusion, and equitable growth (McKinsey & Co., 2018). From this basis, the authors will use the concept of the digital economy as the main basis in analysing the problems raised by the author, regarding the role of SMEs in e-commerce on the Indonesian economy during the Covid-19 pandemic.

E-commerce

The authors recognize that the advancement of globalization and the increase of advanced technology has contributed to the growth of the digital economy. One of these positive effects is the growth of e-commerce, which is progressively providing impetus for trade toward a new type of economy (Ekon, 2021). This condition, at the very least, gave rise to new terms, some of which have multiple meanings. As a result, the authors will provide several definitions of the term (e-commerce) in this study to provide a common perception of e-commerce as intended by the author.

E-commerce can be defined as a set of technologies, applications, and business processes that connect companies, consumers, and the general public through electronic transactions and the electronic exchange of goods, services, and information (Kominfo, 2016). In its evolution, e-commerce has been further subdivided into several types based on their characteristics. There are several types of e-commerce: (1) Business to Business (B2B), (2) Business to Consumer (B2C), (3) Consumer to Consumer (C2C), (4) Consumer to Business (C2B), (5) Business to Administration (B2A), (6) Consumer to Administration (C2A), and (7) Online to Offline (O2O) (Pham, 2021).

The definition of e-commerce in this study refers to the definition of C2C e-commerce, one of the several types of e-commerce mentioned earlier. C2C is a type of e-commerce that includes all electronic transactions between consumers for goods or services. These transactions are typically carried out through third parties who provide an online platform for these transactions (Binus University, 2020). Tokopedia, Shopee, Bukalapak, Blibli, and other C2C e-commerce sites are some examples. In this research, the authors will attempt to focus on the definition of C2C e-commerce, which will focus its discussions on the e-commerce marketplace platforms such as Tokopedia, Shopee, Bukalapak, and Blibli, based on this basic definition. This selection is based on the author's aforementioned argument, that e-commerce in Indonesia is distinct because the majority of e-commerce in Indonesia is composed of SMEs. As a result, the authors will be able to determine how far the contribution of SMEs through e-commerce will have an impact on the Indonesian economy, particularly during the Covid-19 pandemic.

Methods

This study employed qualitative research methods in accordance with descriptive analysis explanations. The authors gathered data through library research techniques, both for primary and secondary data. Qualitative research was chosen as the main basis for this study to allow the authors to describe the data in an depth and elaborative manner. Furthermore, due to several limited conditions, such as the ongoing pandemic, the authors chose literature studies as the primary source of data.

The authors will use primary data from several official sources in their research, including the marketplace, the Indonesian government, and various other supporting agencies. There are several types of data, including data on the number of SMEs, Indonesia's GDP, and other information. In addition to primary data, the authors will use secondary data that was obtained indirectly. The authors obtained secondary data on SMEs, the digital economy, and the Indonesian economy during the pandemic from a variety of sources, including books, online and offline news, print media, and other relevant sources. The authors then used some of this data to compile information and present a descriptive analysis of the role of SMEs in e-commerce on the Indonesian economy during the Covid-19 pandemic. To support the originality of this study, the authors will conduct an in-depth examination on the impact of SMEs through use of e-commerce on the Indonesian economy during the Covid-19 pandemic, with an expanded discussion of studies on SMEs prior to and during the pandemic.

Result and Analysis

The Impact of SMEs on the Indonesian Economy through E-commerce

Indonesia ranks sixth in the world in terms of internet usage. This is one of the opportunities that businesspeople can take advantage of in this era of digitalization in the developing economy. SMEs, which are one of the most important sectors in the Indonesian economy exceeding 50% of the annual GDP, can take advantage of the opportunity. E-commerce is one platform that SMEs can use to expand their sales market. This is critical for SMEs to continue to thrive in an increasingly competitive environment. According to McKinsey & Company (2018), economic digitization will accelerate in Indonesia because the country has a formal online trading market of \$5 billion and an informal online trading market of more than \$3 billion. Indonesia is expected to have 30 million online buyers in 2017. With a total population of around 260 million, Indonesia's digital economy is expected to generate an additional 3.7 million jobs by 2025, generating up to 80% higher income growth for small and medium enterprises (SMEs), and providing an additional 2% per year in GDP growth by increasing broadband penetration rate and SMEs' use of digital technology (Puslitbang Aptika & IKP, 2019). This demonstrates that the use of e-commerce will significantly increase the role of SMEs in the national economy.

The use of the digital economy through e-commerce, which is growing and encouraging the growth of SMEs for the nation's economy, is fundamentally based on economic freedom and the impact of technological developments. Economic freedom and the growing use of technology have had a positive impact on Indonesia's economic climate, particularly during the pandemic. This evidence is based on the argument that economic freedom enables various entities (individuals, teams, businesses, and communities) to take advantage of the positive effects of technology in the economy in a flexible manner (Robin & Tribunella, 2009). According to the findings of this study, the Covid-19 pandemic has forced the economy to shift from a traditional model to a modern model with a digital system. This condition can at least explain to us that digitalization is more than just a shift from physical to digital activity. More importantly, the advancement of digital technology has had a positive impact on the economic climate. In this particular case, it is about Indonesia's economic resilience in the face of a pandemic via e-commerce.

The year 2020 was a difficult year for the Indonesian economy, as the country was hit by the Covid-19, which hampered the Indonesian economy at the time. The Covid-19 virus, which spread quickly through community interaction, has prompted the Indonesian government to take steps to limit community mobilization in order to reduce virus transmission. The existence of the government regulations that limit people's mobility has encouraged the migration of people's activities to the digital space. This condition was absolute and had an impact on Indonesian SMEs. In Indonesia, SMEs players who are also business people were not being left behind in taking advantage of the digitalization opportunities created by the Covid-19 pandemic. SMEs in Indonesia were already using e-commerce to market their products prior to the Covid-19 pandemic. However, the ongoing Covid-19 pandemic in 2020-2021 has had an increasing impact on the digital economy space. In accordance with this condition, the government, through the Coordinating Minister for Maritime Affairs and Investment, Luhut Binsar Panjaitan, expressed appreciation for the use of the digital economy space at the "Pembukaan Lokal Keren Jawa Timur" (Lokal Keren Jawa Timur is a digital marketing event that showcases a variety of typical East Java products) on August 7, 2021. According to Minister Luhut, the number of micro, small, and medium-sized enterprises (SMEs) participating in e-commerce increased by 6.5 million between May 2020 and June 2021. This phenomenon can be seen through Indonesia's e-commerce sites like Tokopedia and Bukalapak. During the pandemic Tokopedia had 86.5% of new business that joined as Tokopedia partners. During the pandemic, Tokopedia also encouraged SMEs players to survive, rise, and develop their business through digital adoption during this time (Tokopedia, 2021). Table 1 shows the number of SMEs that joined Tokopedia during the pandemic.

Table 1. Number of SMEs in Indonesian e-commerce (Tokopedia) during the pandemic in 2020 (PSBB)

Month	Number of SMEs (%)
January - February	5,8
March - April	37,5
May - June	63,8
July - August	81,1

Source : (LPEM FEB UI, 2020), processed by the authors

Several reasons that made SMEs join the e-commerce platform, Tokopedia, are more time efficiency, reduced income in offline business, and less risk than offline business. These reasons illustrates that sellers believe that through e-commerce they can reach a wider market than before and be more productive. The increased participation of SMEs in e-commerce also contributed to an increase in the number of transactions (CNN Indonesia, 2021). E-commerce transactions in Indonesia have increased year after year. E-commerce transactions in Indonesia increased by 29.4 percent in 2020 compared to the previous year, and positive transactions continued during the Covid-19 pandemic. Table 2 shows the details of e-commerce transactions in Indonesia each year. In 2017, Indonesia recorded Rp 42.2 billion in e-commerce transactions. In 2018, e-commerce transactions in Indonesia more than doubled to Rp 105.6 billion. Indonesia's e-commerce transactions increased to Rp 205.5 billion in 2019. And in 2020, when the Covid-19 pandemic struck Indonesia, e-commerce transactions remained positive at Rp 266.3 billion (Jayani, 2022).

Table 2. Number of e-commerce Transactions in Indonesia in Rupiah (Rp)

Year	Number of e-commerce transactions (Rp)
2017	42,2 Billion
2018	105,6 Billion
2019	205,5 Billion
2020	266,3 Billion

Source: (Jayani, 2022), processed by the authors

Increasing number of transaction also happened in the Indonesian e-commerce (Tokopedia) during pandemic in 2020 and table 3 shown it:

Table 3. Number of SMEs Transactions by SMEs in Indonesian e-commerce (Tokopedia) during the pandemic in 2020 (PSBB)

Month	Number of SMEs (%)
January - February	4,4
March - April	53,7
May - June	79,3
July - August	109,3

Source : (LPEM FEB UI, 2020), processed by the authors

From table 1 and 3 we can see that e-commerce is one of the media used by Indonesian people for conducting their activities during the pandemic. The increasing the number of Tokopedia partners (mitra) and number of transactions through Tokopedia during the pandemic shows proof of the significant role of e-commerce in the Indonesian economy during the pandemic. Essentially, an increase in the number of SMEs that use e-commerce platforms is followed not only by an increase in the number of transactions, but also by an increase in employment and a contribution to national GDP. This condition is demonstrated by the data in 2020, where SMEs absorb nearly 97 percent of the workforce from the nationally (BKPM, 2021a). Furthermore, the annual contribution of SMEs to GDP is greater than 50%. The percentage value of SMEs' contribution to the national GDP each year can be seen in Table 4 below. In 2017, the contribution of SMEs to GDP was 57.30%. In 2018, the contribution of SMEs to GDP reached 57.24%. In 2019, the contribution was 57.14% (DPR, 2021). This positive trend can be seen in 2020, where the increase in the number of SMEs via the e-commerce market has had an impact on increasing SMEs' transactions in Indonesia. This is demonstrated by the percentage contribution of value to GDP, which is 61.97 percent or Rp 8,500 trillion (BKPM, 2021a).

Table 4. The Contribution of SMEs to the Indonesian GDP (Percentage)

Year	The Contribution of SME's to the Indonesian GDP (Percentage)
2017	57,30%
2018	57,24%
2019	57,14%
2020	61,97%

Source: DPR (2021) & BKPM (2021a), processed by the authors

Based on the previously described concept of economic digitization, there are several benefits that can be generated by its existence of economic digitization. The first is the positive impact on a country's contribution to economic growth. This can also be seen in Indonesia, where an increase in SMEs using e-commerce was followed by an increase in their contribution to the national GDP. The second advantage of digitalization is an increase in job opportunities. This phenomenon occurred during the Covid-19 pandemic, where many large companies were forced to lay off workers due to restrictions on their operational mobility, but SMEs experienced an increase in labour absorption, which was driven by an increase in the number of employee sales transactions. As a result, the Covid-19 pandemic did not result in a decrease in the contribution of SMEs to the national economy, due to it capitalization of economic digitization opportunities.

According to the various studies presented above, SMEs play an important role in the economies of Southern countries such as Indonesia. This is because Indonesia's e-commerce characteristics are the domination of SMEs, which has significant contributions. At the very least, the following arguments show how SMEs are one of the sectors that contribute significantly to the Indonesian economy. Several existing digital platforms help SMEs play an important role in e-commerce in Indonesia. To avoid the dominance of imported products, several digital platforms, such as Shopee, target Indonesian SMEs for export. This program was essentially formed through the "500 Thousand SMEs Program," which is expected to be able to increase the value of production and enter foreign markets by the end of 2030. This collaboration was conducted in collaboration with the Indonesian Chamber of Commerce and Industry (KADIN), with the goal of providing SMEs with the foundations of export knowledge (Burhan, 2021).

Apart from Shopee, several e-commerce platforms in Indonesia, such as Tokopedia and Bukalapak, pay close attention to SMEs. Bukalapak, for example, released a system called "Segment Mitra Bukalapak," which was

designed to support the movement of SMEs in Indonesia through the Bukalapak digital platform. This policy, which has been in effect since 2016, primarily targets small businesses, street vendors, and individuals. Aside from developing the SME market in Indonesia, the main goal of this policy is to empower the development of SMEs in Indonesia to be able to run businesses efficiently (Suryahadi, 2021). Tokopedia, like Bukalapak and Shopee, is working to equalize the economy through digital platforms. Several businesses goals include gaining new sellers by 86.5%, 99% reaching all regions of Indonesia, and increasing SMEs business in Indonesia by 2.5 times during the pandemic (Tokopedia, 2021). Based on these grounds, we can conclude that the advancement of technology through digital economic platforms facilitated the Indonesian economy during the pandemic. Through the e-commerce market, the digital economy platform has proven to have assisted SMEs in playing a key role in Indonesia's economic resilience.

According to Tulus Tambunan (2009), there are several reasons why SMEs are important to the Indonesian economy. For starters, the number of SMEs is large and spread across both urban and rural areas. Second, SMEs are classified as highly labor-intensive, with the potential for significant job growth and income growth. Third, many SMEs in the agricultural sector contribute to development indirectly. Fourth, SMEs aid in the employment of many workers with low levels of education. Fifth, in times of economic crisis, such as the 1997/1998 Monetary Crisis, SMEs were able to survive. Sixth, it serves as a starting point for rural investment mobility as well as a forum for increasing tourist capacity. Seventh, it is a tool for rural residents to divert their consumption expenditure into savings. Eighth, SMEs are capable of providing necessities at a low cost. Ninth, SMEs are able to adapt quickly to changing times due to various types of investment and investments. Finally, SMEs are extremely adaptable (BKPM, 2021a).

In response to the digital economy, which is has increasing positive contributions to the Indonesian economy, particularly during the Covid-19 pandemic. The Indonesian government is also establishing clear rules and regulations to promote digital economic growth through e-commerce. One of these regulations is the Presidential Regulation Number 74 of the Republic of Indonesia concerning the Road Map of the Electronic-Based National Trading System (E-commerce Road Map) for 2017-2019 (Kominfo, 2021). Essentially, the Presidential Regulation seeks to regulate a number of issues concerning the development of the digital economy. This regulation then attempts to regulate a number of sectors related to various types of digital transactions. Essentially, the ultimate goal of this regulation or legal protection is to establish ground rules and provide a strong impetus for the development of the digital economy.

The first regulatory area is funding. There are various types of regulatory schemes in the funding category. First, platform developers can get "Kredit Usaha Rakyat" or soft loans. Second, grants for start-up companion business incubators are provided. Third, Universal Service Obligations funds are available for digital SMEs and e-commerce. Fourth, additional funds, are provided that are also known as "angel capital." Fifth, donors provide seed capital. Sixth, crowdfunding is available. And, finally, the "Daftar Negatif Investasi" or DNI's opening (the DNI regulation policy is the government's effort to encourage economic activity leading sectors). The goal of regulation's funding scheme is to help the digital economy grow. Next, in terms of taxation, the Indonesian government establishes clear guidelines for the e-commerce tax system. First, there are tax breaks for local investors who invest in start-ups. Second, there is a simplification of tax permits/procedures for e-commerce start-ups with annual revenues less than Rp 4.8 billion. Finally, fellow e-commerce entrepreneurs are treated equally in terms of taxation (Kominfo, 2021). This regulation's goal is to provide clarity and tax relief to encourage digital economic growth.

The following section is about consumer protection. Some of these regulations can be summarized as follows: first, government regulations on electronic trading transactions. Second, regulatory harmonization. Third, the e-commerce payment system for trade and government goods/service spending. Fourth, the gradual establishment of a national payment gateway. This condition is intended to improve consumer protection as

the digital economy grows. Another effort made by the government is the availability of education and human resources, which include a variety of programs. First, there will be an e-commerce awareness campaign. The second program is the national incubator program. The third course is about e-commerce. Fourth is to educate consumers, actors, and law enforcement about e-commerce (Kominfo, 2021). Education and human resources are fundamentally important pillars for the growth of the digital economy. Because it is certain that without awareness of a good digital economy, there will be hindrance in its development.

Logistics is the next section of the regulatory scheme. The first method is to make use of the National Logistics System. Second, local/national courier companies should be strengthened. Third, there will be an expansion of logistics data transfer for SMEs. Fourth, develop the logistics development from villages to cities. The goal of this regulation and logistics enhancement is to improve the delivery of goods by SMEs via e-commerce. Because, in the absence of a good system, the logistics delivery route will undoubtedly be hampered, resulting in a decrease in the quality of e-commerce delivery.

The next regulation is the communication infrastructure is the next regulation. One method stated is building a broadband network that will be used to improve and support the form of cyber security regulations. The schemes are, first, the formulation of a model of a national surveillance system in e-commerce transactions, that can be used as a cyber security regulation. Second, raise public awareness of cybercrime. Third, develop the rules for consumer data storage and make available the certification for consumer data security (Kominfo, 2021). This condition is also consistent with the statement by Johnny G. Plate, the Indonesian Minister of Communication and Information, who stated that the government will bring three digitalization issues to the G20 Presidency in 2022, with digitalization being one of the important factors that emerged as a result of the Covid-19 pandemic, which pushed migration of community activities to the digital space (Kominfo, 2021). We can see from this Presidential Decree that the government recognizes the importance of developing SMEs for the economy, thus the government tries to regulate issues that can encourage the success of SMEs in the era of economic digitization by paying attention to the factors required from upstream to downstream.

According to what has been described above, the current era of economic digitalization benefits every country, particularly Indonesia. With this digitalization, SMEs, an important sector in the Indonesian economy, can broaden their market reach, increasing their contribution to the national GDP and encourage more employment. On the other hand, we cannot deny that economic digitalization, which blurs borders between countries, brings with its challenges and obstacles that must be overcome in order to seize as many opportunities as possible. The Indonesian government should pay close attention to this in the future. From this argument, the authors aim to describe further about the challenges of Indonesia's economic digitalization from the perspective of the Global South in the following sub-discussion.

E-commerce Development Issues from the Global South Perspective

As previously mentioned, Indonesia is one of the countries with the fastest-growing internet user populations in the world (McKinsey & Co., 2018). Indonesia ranks fourth globally in terms of internet users in 2021, behind China, India, and the United States (Johnson, 2021). Indonesia's internet users number amount to around 202.35 million, or around 76.8% of the country's total population. Although the percentage of internet users in Indonesia is lower than in Northern Countries, Indonesia has one of the world's largest internet users countries in terms of total users. This condition is supported by the fact that from 2020 to 2021, the number of internet users in Indonesia increased by 11%, reaching 175.4 million (Pangarepan, 2021).

It is expected that the rise of interconnectedness that has resulted from the rise of the internet and technology will have a favorable impact on the growth of Indonesia's digital economy. One of them is the increase of the SMEs sector through economic digitalization, which has a favorable impact on Indonesia's economic growth. Nonetheless, we recognize it or not, Indonesia, as one of the Southern Countries with the foundation of its

digital economy driven by the SMEs sector, is confronted with a number of major issues. These are some of the issues that could eventually limit the growth of the digital economy through a general point of view. So, in this research, the authors attempt to evaluate the issues faced by Indonesian SMEs in the context of Indonesian e-commerce development, particularly during the Covid-19 pandemic.

The first issue is the availability of dependable logistics and infrastructure. It will essentially have an impact on the quality of service supply and the simplicity of exporting SME products if logistical assurances and infrastructure have not been maximized. Furthermore, Indonesia's e-commerce issues are exacerbated by a lack of logistics supply and variable service quality (McKinsey & Co., 2018). In 2018, Indonesia ranked 46th out of 160 nations in terms of infrastructure and logistics by the World Bank. The fact that Indonesia is placed 46th reflects the situation and the condition of Indonesia's logistics and infrastructure through a general point of view, even though Indonesia has improved the quality of its infrastructure and logistics assurance in recent years. Nonetheless, Indonesia still continues to face a number of infrastructure and logistics issues that are impeding the development of SMEs through e-commerce (World Bank, 2018a).

Interestingly, the expansion of SMEs via e-commerce channels will have a positive impact on the expansion of the logistics services network in Indonesia. However, we are still aware that the infrastructure has not yet been optimized as the main access for logistics services to distribute SMEs goods, resulting in less than optimal distribution of goods (Nuraeni, 2016). This condition is at least one of the major impediments to the growth and development of SMEs in Indonesia through e-commerce channels. Infrastructure issues as the primary distribution channel require more attention in order to support the quality of development of the Indonesian e-commerce market.

The second issue concerns payment access through financial services. The ease of payment and access to financial services is one of the primary conditions that can support the improvement of the quality and quantity of SMEs in the e-commerce market. This condition also includes the public's convenience and security in using mobile banking (McKinsey & Co., 2018). In 2018, Indonesia ranked 83 out of 143 countries in terms of awareness, convenience, and security in accessing financial services, with only 48.86% of people having access to financial services. This ranking is lower than that of the other Southeast Asian countries with higher percentages, such as Singapore, Malaysia, and Thailand (World Bank, 2018b). This condition should at the very least be a source of concern for all parties involved in the dynamics of SME development through the digital market. Easy access and high public awareness in digital and financial literacy also play an important role in the success of Indonesia's digital market. Without easy access to financial services and a good understanding of the digital economy, it is certain that the development of SMEs through the digital market will face challenges.

In line with these conditions, the third issue that frequently becomes an obstacle for many Southern countries is digital security. Both in terms of the security guarantees that the government can provide, and the awareness of each community in conducting digital transactions. Digital security is also one of the primary indicators that support the growth of the digital economy. According to the National Cyber Security Index (NCSI), Indonesia ranks 83rd out of 160 countries in terms of digital security guarantees. This condition essentially shows that certain parties can still manipulate the system in digital transactions to commit fraud (NCSI, 2021). This condition can slow the development of SMEs transactions via the e-commerce sector, causing public concern and fear in conducting digital transactions.

The Ministry of Communication and Information of the Republic of Indonesia has released several types of online fraud cases that continue to occur in the Indonesian digital market. On average, these cases are dominated by the most common method, which is fraud in the e-commerce sector, that also increased during the Covid-19 pandemic (CNN Indonesia, 2021). According to the Ministry of Communication and Information, fraud is classified into five types. The first type is commonly referred to as "phishing," and it involves deception via phone, e-mail, or text message. The second form is "pharming," which is used to direct people to specific

locations. The third mode is "sniffing," which includes the victim's cyberattack mechanism. The fourth form is "money mule," which uses a specific prize method of luring victims. The final type is "social engineering," which includes psychologically manipulating the victim to provide certain data (Kominfo, 2021).

We can be certain that all of these types of fraud have an impact on the risks of ensuring transaction security in the e-commerce market. This is due to the fact that the presence of several threats will affect the openness, security, and convenience of users when conducting digital transactions. In this situation, the government must prioritize and exert effort to create a safe and comfortable environment for digital transaction users, with the goal of combating other forms of digital crime. The Electronic Information and Transaction Law (UU ITE) and the Government Regulation on the Implementation of Electronic Systems and Transactions (PP PSTE) are two main regulations that have been formulated and should be emphasized by the government (The Conversation, 2019). It is expected that the strengthening of a clear legal protection regarding digital transactions will have a significant impact on the creation of security in the digital economy sector.

The fourth problem involves the internet network and the structure of the digital SMEs' ecosystem. This problem is commonly cited as a barrier to the growth and development of Indonesian SMEs. This is due to the difficulties encountered in developing a digital ecosystem (McKinsey & Co., 2018). The internet network is one of the most serious issues, as it serves as the primary foundation for the ongoing digital economy market, as well as all forms of transactions and marketing within it. According to the Indonesian Ministry of Communication and Information, one of the major challenges in providing internet in Indonesia is geographical constraints (CNN Indonesia, 2020). Whereas 3T regions (Terluar, Terdepan, dan Tertinggal or Outermost, Foremost, Underdeveloped) regions are frequently the main impediment to the internet network becoming the primary form of support for the development and growth of the digital economy.

Limited internet access will inevitably create barriers to the development of a good and supportive digital SME ecosystem. This condition then has an impact on the limited number of SMEs in terms of marketing and transactional activities. As a result, one of the efforts that requires more attention is the expansion of internet network coverage, which is one of the primary requirements for the development and growth of the digital economy in Indonesia's e-commerce environment. The increased and expanded stability of the internet network will have a positive impact on the creation of a digital SMEs ecosystem.

Some of these issues became the foundation of the author's argument in describing the various types of challenges to the development and growth of e-commerce in Indonesia. The four main problems for Southern countries, particularly Indonesia, in building consistent digital economic growth are logistics and infrastructure guarantees, access to financial services, digital security guarantees, and access to the internet. The role of stakeholders and increasing public awareness in the field of digital literacy, in addition to the government's attention and responsibility, have a significant impact on the development of the digital market. With good communication among all parties, the role of SMEs in e-commerce can make an increasingly positive contribution to the national economy. Furthermore, e-commerce is one of the keys to keeping the wheels of the Indonesian economy turning in the post-Covid-19 pandemic era.

Conclusion

Globalization and technological advancements, have brought about numerous changes in the business aspect of the economy. The traditional forms of business, such as opening a shop, bartering, offering products directly, and door-to-door trading, are no longer prevalent. With the advancement of technology, the methods in doing the business and the face of the economy have changed to become easier and faster. As part of the digital economy, e-commerce has provided convenience as well as a positive impact on economic development. This condition also creates favourable conditions for an interconnected, simple, and competitive market, which benefits the nation's economy.

Indonesia is one of the countries that has prospered from the growth of the e-commerce market. Indonesia has the world's fourth fastest growing population of internet users. Every year, the number of internet users in Indonesia grows, which, of course, has a positive correlation with the growth of the Indonesian e-commerce market that operates in the digital world. Aside from these conditions, the Indonesian e-commerce market has unique qualities, through the domination of SMEs. This unique characteristics later became the foundation of strength for the SMEs-dominated Indonesian e-commerce market.

Essentially, the new face of the economy through the e-commerce platforms has provided numerous benefits to the Indonesian economy. Some of them are beneficial to the national GDP, employment opportunities, and the movement of money through the e-commerce market. Especially when the Covid-19 pandemic hit, the SMEs' movement through use of e-commerce continued to contribute positively to the country's economy. Some of these benefits form the basis of the argument that the development of SMEs through the Indonesian e-commerce market has had a positive impact on the country's economy, particularly during the Covid-19 pandemic.

However, logistics, consumer security in transactions, digital security, and internet access are some of the main obstacles for the Global South, such as Indonesia, in keeping up with the growth of the digital economy. Some of these major obstacles are clear evidence that there are still barriers to the growth of the Indonesian e-commerce market. Clear business and regulations, expanding the reach of the internet, and supervising digital transactions are some of the real steps that the Indonesian government continues to strive for in maintaining the development of the Indonesian e-commerce market.

The authors acknowledge that there are several flaws in their study of the role of SMEs in the Indonesian economy during the Covid-19 pandemic. As a result, the authors make recommendations for future studies with a similar theme in order to fill the author's "gap." Several research areas can be expanded upon in future studies, such as the role of SMEs in e-commerce from the perspective of the Global North, which the authors believe have characteristics and study results that differ from the majority of countries in the Global South. With a supportive business climate from the government as a partner, the characteristics of SMEs in the Global South, such as Indonesia, tend to grow more massively and rapidly. One of the main characteristics of the SMEs in the Global South is the conditions for encouraging investment and creativity in small business groups. As a result, the authors can propose that one of these areas become the focus of the next study. In addition, the comparative model of SMEs growth between two or several countries, both among Global South countries, and between North-South countries can also be the focus of the next interesting study.

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