

The Digital Economy Growth and Prospect in Indonesia During the Covid-19 Pandemic

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ABSTRACT

The COVID-19 pandemic hit the economic growth in all of the countries, including Indonesia. The Indonesian economy fell to minus 5 percent in 2020. Many countries try to develop a digital economy by transforming into digital e-commerce to boost economic growth gradually. Therefore, there should be some prospects of digital economy growth during the COVID-19 pandemic. This paper aims to describe the digital economy growth and the prospect in Indonesia during the COVID-19 pandemic. This paper is a narrative literature review. Databases were taken from Science Direct and Google Scholar. Inclusion criteria were research and literature review. Exclusion criteria were un-peer reviewed articles and unavailable full-text articles. The articles were read twice to reduce the possibility of bias. Articles were published from 2016 onwards. The literature review result revealed that the development of the digital economy has been increased during the COVID-19 pandemic. This is due to the Covid-19 pandemic control policy through the Large-Scale Social Restrictions Policy (Pembatasan Sosial Berskala Besar/PSBB). Therefore, people buy some food, fashion, or household equipment through digital e-commerce. Furthermore, another policy, namely the Policy for Enforcement of Restrictions on Community Activities (Pemberlakuan Pembatasan Kegiatan Masyarakat/PPKM) was implemented from February until September in some areas. Policies are taken to help the digital transformation for some industries. There are some steps for increasing the digital economy growth such as encouraging entrepreneurship, developing international collaboration for the digital economy, and increasing high-speed internet connectivity. Indonesia is one of the countries that has active mobile internet users. This condition can boost the growth of the digital economy. There is a prediction that the digital economy can grow up to three times in 2025. The essential steps for developing a digital economy include enhancing connectivity, digital skills, digital literacy, privacy, and cybersecurity regulations. The advanced steps are doing transformation and regional collaboration. In conclusion, the digital economy growth and prospect in Indonesia can be achieved by implementing some strategic steps, such as encouraging entrepreneurship, developing international collaboration for the digital economy, and increasing high-speed internet connectivity. The growth of the digital economy can be enhanced due to a large number of active internet users in Indonesia. The prospect of the digital economy is very good in the future. It needs transformation and regional collaboration.

Keywords: Covid-19, Digital Economy, Growth, Prospect

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1. INTRODUCTION

The COVID-19 pandemic hit the economic growth in all of the countries, including Indonesia. The Indonesian economy fell to minus 5 percent in 2020. The main priority of the Government Work Plan (Rencana Kerja Pemerintah/RKP) in 2020 is overcoming the COVID-19 pandemic. Many countries try to develop a digital economy by transforming into digital ecommerce to boost economic growth gradually. Therefore, there should be some prospects of digital economy growth during the COVID-19 pandemic. [1]

The Large-Scale Social Restrictions Policy (Pembatasan Sosial Berskala Besar/PSBB) is a new policy to control the transmission of the COVID-19 pandemic. Later on, the special Policy for Enforcement of Restrictions on Community Activities (Pemberlakuan Pembatasan Kegiatan Masyarakat/PPKM) substituted PSBB in early February 2021. The national vaccination program is started. It is hoped that those programs can help increase economic growth [1].

The COVID-19 pandemic causes shock to the macroeconomic condition in Indonesia. The effects are quite wide such as the reducing exchange rate of the Indonesian currency, tax revenues, inflation rate, and the values of export imports. However, the digital economy conditions are not negatively affected by the COVID-19 pandemic. The digital economy shows good performance [2].

Although there is the potential of positive impact in implementing digitalization, approximately less than 20% of creative businesses are switched to online platforms. The subsectors are in the game and advertising. However, due to the COVID-19 pandemic, many subsectors are declined, especially the ones that require physical contact. Funding is hard to be obtained because the economic condition is not stable. This condition leads to the opening of the online subsector, such as e-commerce, streaming film, television, music, and games. Video streaming and online shopping application usage is increased more than 10 percent during the COVID-19 pandemic. It is a good opportunity to develop this sector of business. [1], [3]

Implementing e-commerce in Indonesia for supporting the digital economy face some problems in the practice. The main obstacles are technical constraints and non-technology issues. Technical issues are lack of standard of e-commerce quality, reliability, safety, bandwidth issues, applications, and network problems. Meanwhile, the non-technological issues include lack of government regulations, the different perceptions about unsafe and expensive e-commerce, also the attitude of users and sellers. E-commerce should be seen as a

universal business. Therefore, it is critical to plan, create rules, and give incentives to enhance the growth of ecommerce [3]. This paper aims to describe the digital economy growth and the prospect in Indonesia during the COVID-19 pandemic.

2. MATERIALS AND METHODS

This paper is a narrative literature review. Databases were taken from Science Direct and Google Scholar. Inclusion criteria were research and literature review. Exclusion criteria were un-peer reviewed articles and unavailable full-text articles. The articles were read twice to reduce the possibility of bias. Articles were published from 2016 onwards.

3. RESULTS AND DISCUSSION

The literature review result revealed that the development of the digital economy has been increased during the COVID-19 pandemic. This is due to the Covid-19 pandemic control policy through the Large-Scale Social Restrictions Policy (Pembatasan Sosial Berskala Besar/PSBB). Therefore, people buy some food, fashion, or household equipment through digital ecommerce. Furthermore, another policy, namely the Policy for Enforcement of Restrictions on Community Activities (Pemberlakuan Pembatasan Kegiatan Masyarakat/PPKM) was implemented from February until September in some areas [1].

3.1. Policies and Strategies to Increase the Development of the Digital Economy

Policies are taken to help the digital transformation for some industries. There are some steps for increasing the digital economy growth such as encouraging entrepreneurship, developing international collaboration for the digital economy, and increasing high-speed internet connectivity. Indonesia is one of the countries that has many active mobile internet users. This condition can boost the growth of the digital economy. There is a prediction that the digital economy can grow up to three times in 2025. The essential steps for developing a digital economy include enhancing connectivity, digital skills, digital literacy, privacy, and cybersecurity regulations. The advanced steps are doing transformation and regional collaboration [1].

The infrastructure sector needs to be developed in supporting economic recovery. When online shopping is increased, logistics cost, and transportation need to be concerned. High transportation costs could result in a decrease in economic growth. Therefore, an integrated airport and port must be developed. Infrastructure development will support the economic transformation, including the digital economy [1], [3].

Six important strategies in Indonesia's economic transformation are as follows:[1]



- 1 The First Strategy, namely Competitive Human Resources, especially in health, education, innovation, and research.
- 2 The Second Strategy, namely Economic Sector Productivity includes Industrialization, Productivity, also Agricultural Modernization.
- 3 The Third Strategy, namely Green Economy includes a blue economy, low carbon usage, and energy transition to increase sustainable green jobs in reducing greenhouse gas emissions.
- 4 The Fourth Strategy, namely Digital Transformation. This strategy includes digital infrastructure, utilization, and strengthening.
- 5 The Fifth strategy, namely domestic economic integration. This strategy consists of economic powerhouses, superhubs, air hubs, sea hubs, and the domestic value chain.
- 6 The Sixth Strategy is Relocating the National Capital. This capital is a source of new growth. It can balance the economy between regions.

During the COVID-19 pandemic, the supply chain is affected due to lockdown policy, flight stops, and discontinuation of the company activities [4]. The supply chain is an important factor that supports the economic flow of the business. [5] The strategies above are critical in improving the economic growth related to the recovery period after the COVID-19 pandemic. The digital economy is also affected by the supply chain. The digital economy is critical because it represents one of the indicators of macroeconomic [2].

3.2. Prospects and Growth of The Digital Economy

The digital economy is using electronic commerce for shopping. Shoppers look for products and sellers set their online stores. The transaction can be done any time, including at night when usual shops are closed. Online shops can help in saving time when buyers are looking for specific products without wasting any transportation time. [3], [6].

The traditional economy is not practical because the customer needs to come to the shop. It is not efficient in time and transportation. When the transaction is done digitally, the time for queue and transportation is saved. The media used are computers, mobile phones, and internet connectivity. The transaction can be done anytime and anywhere. This is the advantage of online shopping and the digital economy. [3]

The Wall Street Journal stated that the trend of ecommerce in Indonesia is increasing each year. Although the number of transactions is less than in China, Japan, South Korea, and India, this number is promising to be increased more. Therefore, businessmen need to develop e-commerce businesses nowadays [3].

The development of the internet affects the growth of the digital economy. The mode of economic activities shifts from traditional to digital type. The increasing of internet usage will enhance the prospect and growth of the digital economy. The users of the internet feel the benefits of online systems, including shopping online [3].

3.3. The Advantages of Using E-Commerce

Some advantages of using e-commerce can be described as follows [7], [8]:

- 1. Can reach the customers in the world
- 2. Provide interactive communication with efficient cost
- 3. Can easily deliver the message of price changes or other messages
- 4. Available 24 hours
- 5. Consumers can give feedback
- 6. The role is as an alternative distribution channel
- 7. Customization
- 8. Global marketplaces.

E-commerce can be implemented based on the principle of 4C, namely connection (internet), creation (product/service), consumption, and control. The success of that principle will result in the return of investment (ROI) of the company. Feedback, sharing, review, and recommendation are new features of e-commerce. Data sharing can be done faster among users online [7].

3.4. The Characteristics and Types of E-Commerce in The Digital Economy

Based on Traver & Laudon (2017), there are some unique characteristics of e-commerce implementation as follows [9]:



- 1. **Ubiquity**; It means that e-commerce technology is available anytime and anywhere. It does not need any physical places for the transactions.
- 2. **Global reach technology**; The transaction can happen in different cultures, areas, regional, national, or international with less cost.
- 3. **Universal Standard**; There is a universal standard for e-commerce in the world.
- 4. **Richness**; There is more information in the e-commerce application rather than in the traditional market.
- 5. **Interactivity**; Interactivity between shopper and seller is available by online technology.
- 6. **Information Density**; The technology can decrease the process cost. Communication is dense based on time, speed, and accuracy.
- Personalization and customization; The message can be sent personally to the customers. Wish list products or services can be customized based on each customer. Previous history transactions can be saved also.
- 8. **A Social Technology**; E-commerce technology enables users to share their shopping experiences with their friends

The type of e-commerce can be divided into some categories as follows [9]:

- 1. **Business to Customer (B2C) E-commerce**This is the most common type of e-commerce.
- 2. **Business to Business (B2B) E-commerce.** This type is the e-commerce business between one company and another company.
- 3. **Customer to Customer (B2C) E-commerce.** This type is the e-commerce business between one consumer to another.
- 4. **Social e-commerce.** This type of e-commerce enables social interaction and networks among users.
- Mobile E-commerce. This type of ecommerce enables online transactions by mobile devices such as iPhone or Android.
- 6. **Local e-commerce**. This type of e-commerce focuses on the consumer with the same geographical location.

3.5. The Challenges of Implementing Digital Economy in Indonesia

E-commerce in Indonesia has just been implemented recently. Therefore, not all people are familiar with it. The challenges are providing quick and smooth internet connectivity and not all areas can access e-commerce applications. Meanwhile, tax is taken from the transaction in e-commerce recently [3].

The digital economy cannot be done without the help of the smooth development of information technology. This condition enables humans to act fast, practical, and effectively. The transactions become more efficient. An effective service can be delivered by the company through e-commerce platforms. Therefore, e-commerce has a vocal role in increasing economic growth. It also has good prospects for the future. A revolution can be achieved when the digital economy has entered the market. There are huge changes in the economic, cultural, and social aspects. Those impacts are felt by customers, organizations, and customers. [8]

Julisar and Eka Miranda stated that there is a lack of gold standards in implementing e-commerce in Indonesia. Some limitations in implementing e-commerce are bandwidth and web-server. Meanwhile, from the non-technological aspects, the government has not regulated the trade transaction law for the safety of consumers and sellers. Many people wait for a stable e-commerce ecosystem before they participate in the e-commerce system. [10]

Due to limitations in using e-commerce, all users and stakeholders must understand and identify the related terms. The usage and origin should be understood also. Reliability, security issue, social divisions, and the internet policy should be obtained before using e-commerce. [8]

Joko Widodo, as the President of Indonesia, is very concerned about the development of the digital economy. He settles some policies in developing fixed and mobile broadband in Indonesia to support the digital economy. There are approximately 135 cities that have had 4G connections recently. [3]

The law that regulates e-commerce transactions in Indonesia nowadays is based on Electronic and Information Law number 11 the year 2008. This law gives protection to users. However, there is no specific operational definition for e-commerce inside the law. The trade-in law is defined as a wide activity including transactions by computer, internet connectivity, and/or other electronic media. [3]

Regulation for a viable climate for economic growth is important. Based on the Title III of the Indonesian Civil Code, the regulations are needed to ensure the safety of the economy. On the other side, the investors, customers, and sellers have safe transactions [11].

There are some successful dimensions of information systems in e-commerce as follows [7]:

1. **The system quality**; It includes internet connectivity. It is measured based on the function, availability, adaptation, and response time of download.



- 2. **The information quality**; It includes the content of the network, namely complete, easily understood, and safe.
- 3. **The quality of the service**; It includes support from the provider
- 4. **Usage**; Usage is measured based on the number of visit pages for information searching and transactions
- 5. The satisfaction of the users (consumers); The satisfaction of the users is measured based on all of the users' experiences, namely purchase, billing, product delivery, and services.
- 6. Benefits; Benefits mean the e-commerce can give some positive effects and balance it with the negative impacts. It needs collaboration from the customers, suppliers, employees, organization, industry, market, and society.

The critical issues in improving e-commerce are improving the service, marketing, and product ordering. E-commerce is based on web technology. It can be free or paid. The introduction of online stores can be used by Small and Medium Enterprises to promote their stores online. Training is given to increase the knowledge of using e-commerce applications. The steps in starting to develop e-commerce are identification and situation analysis, website creation training, content filling, and uploading. The last step is evaluation. Small and Medium Enterprises are encouraged to promote the product and increase the income via e-commerce [12].

4. CONCLUSION

In conclusion, the digital economy growth and prospect in Indonesia can be achieved by implementing some strategic steps, such as encouraging entrepreneurship, developing international collaboration for the digital economy, and increasing high-speed internet connectivity. The growth of the digital economy can be enhanced due to a large number of active internet users in Indonesia. The prospect of the digital economy is very good in the future. It needs transformation and regional collaboration.

AUTHORS' CONTRIBUTIONS

The author is one person, therefore all paper process is done by one person.

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REFERENCES

[1] Muhyiddin and H. Nugroho, "Indonesia Development Update A Year of Covid-19: A Long Road to Recovery and Acceleration of Indonesia's

- Development," J. Perenc. Pembang., vol. V, no. 1, pp. 1–19, 2021, doi: 10.36574/jpp.v5i1.
- [2] B. Wicaksono and A. Uluwiyah, "Lesson Learned from Pandemic COVID-19 in Some Macroeconomics Performances Perspectives," in Simposium Nasional Keuangan Negara, 2020, pp. 568–588.
- [3] A. Firmansyah, "Kajian kendala implementasi e-commerce di indonesia," J. Masy. Telemat. dan Inf., vol. 8, no. 2, pp. 127–136, 2017.
- [4] S. G. Deshmukh, "Post COVID-19 implications for supply chain management," in Supply Chain Management: Challenges and Strategies (SCMCS-20), 2020, no. July, pp. 1–34.
- [5] N. Ben Mabrouk, A. Omri, and B. Jarraya, "Factors influencing the performance of supply chain management in Saudi SMEs," Uncertain Supply Chain Manag., vol. 8, pp. 569–578, 2020, doi: 10.5267/j.uscm.2020.2.006.
- [6] M. Išoraitė and N. Miniotienė, "Electronic Commerce: Theory and Practice," IJBE Integr. J. Bus. Econ., vol. 2, no. 2, pp. 73–79, 2018.
- [7] M. Pradana, "Klasifikasi Bisnis E-Commerce Di Indonesia," Modus, vol. 27, no. 2, pp. 163–174, 2015.
- [8] A. Y. Kapi, N. Osman, R. Z. Ramli, and J. M. Taib, "Multimedia Education Tools for effective teaching and learning," J. Telecommun. Electron. Comput. Eng, vol. 9, no. 2, pp. 143–146, 2017.
- [9] K. C. Laudon and C. G. Traver, E commerce. 2017.
- [10] Julisar and E. Miranda, "Pemakaian E-Commerce Untuk Usaha Kecil Dan Menengah Guna Meningkatkan Daya Saing," ComTech, vol. 4, no. 2, pp. 638–645, 2013.
- [11] E. A. Priyono and A. H. Wulandari, "Regulations for E-Commerce Agreement According to ICT Act and Title III of Indonesian Civil Code," Diponegoro Law Rev., vol. 3, no. 01, pp. 76–88, 2019.
- [12] N. Matondang, A. Muliawati, and E. Krisnanik, "Implementation Of E-Commerce-Based Sales System For Medium Business Bojong Gede – Bogor," Ethos, vol. 6, no. 1, pp. 33–41, 2018.