



ENCOURAGING THE IMPLEMENTATION OF DIGITALIZATION THROUGH MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES (MSME) IN INDONESIA

Hapsari Wiji Utami¹, Debby Nindya Istiandari²

¹UIN Sunan Ampel, Surabaya, Indonesia
hapsari.wiji@uinsby.ac.id

²UIN Sunan Ampel, Surabaya, Indonesia
debby.nindya@uinsby.ac.id

ABSTRACT

This study aims to determine and analyze the challenges and efforts to implement digitalization in micro, small and medium enterprises in Indonesia. This study uses qualitative descriptive analysis techniques, researchers collect information and secondary data from various sources and research results from previous journals related to the digitization of micro, small, and medium enterprises. From the results of the study, information was obtained that the challenge of micro, small and medium enterprises in implementing digitalization is to return to human resources who have low knowledge about digitalization, low skills, lack of experience, as well as the low interest of micro and small businesses to want to learn information and communication technology, besides that lack of access to supporting facilities and infrastructure is also an obstacle to the implementation of digitalization. Meanwhile, basically the Indonesian Government has taken quite a lot of steps to optimize the productivity of micro, small and medium enterprises in the midst of the rapid development of digital technology. Based on this, the author suggests that the Government of Indonesia more intensively optimize the equitable implementation of digitalization in micro, small and medium enterprises in Indonesia which is also followed by increasing digital literacy for micro, small and medium enterprises. In addition, the command can also support the acceleration of digitalization of micro, small and medium enterprises through the development of supporting facilities and infrastructure related to information and communication technology.

Keywords: micro, small and medium enterprises, challenges and barriers, digitalization

INTRODUCTION

Moment this year, the 2030 Agenda for Sustainable Development Goals or SDGs became a reference development. SDGs are agreements for development new in frame push shifting changes toward development based on sustainability rights basic humanity and equality For push development of social, economic, and environmental life. Draft development sustainable This has four inner pillars frame to reach the goal. One of these four pillars is the development of economic goals to reach a growth quality economy

through continuity of opportunity work and business, innovation, industry inclusive, infrastructure adequate, energy clean that is affordable, and supported partnership. With this SDGs concept of objective development, the previous economy more focused on achieving growth economy as high as possible changed to become more focused on development economy sustainability and equality development economics (Pratiwi & Dyas, 2022).

To achieve and realize development sustainable, sector business micro, small, and medium must take roles, as stated by Lestari & Suman (2017) that business micro, small, and medium groups are economy biggest supporters of activity Indonesian economy. This thing can seen from the contribution of business micro, small, and medium to the Indonesian economy, where more than 50 percent economy / Products Domestic Indonesia's gross (GDP) comes from sector business micro, small, and medium as can seen in table following.

Table 1.

Contribution of MSMEs to Indonesia's Gross Domestic Income 2016-2023
(in Percent)

Type of Business	Year							
	2016	2017	2018	2019	2020	2021	2022	2023
Micro	30.25	29.51	29,29	29,29	29.18	29.08	28.97	28.86
Small	12.42	13.39	13.56	13.56	13.49	13.41	13.34	13.26
Medium	14.50	14.40	14.38	14.38	14.40	14.41	14.43	14.44
Total Contribution	57.17	57.30	57.24	57.24	57.07	56.90	56.73	56.57

Source: Ministry of Finance, 2023

Even though it is experiencing fluctuations and tends to show a downward trend, the data in Table 1 shows that more than 50 percent of Indonesia's GDP from 2016 to 2023 was contributed by MSMEs. The large contribution of MSMEs to the economy is contributed by the micro business type, followed by the medium business type and the small business type. Even though there has been a decline, the decline that occurs both in each type of business and in total contribution is no more than 1 percent each year and this is very realistic considering the number of MSMEs is increasing from year to year.

Besides contribution to GDP, as of December 2020 absorption power work in the sector business micro, small and medium by 97 percent, and contribution to Indonesia's exports amounted to 14.7 percent (National Development Planning Agency, 2020). The

National Development Planning Agency (2020) also stated that 52 percent of business are micro, small, and medium including the informal category, and around 98.68 percent of a total of 64.18 million business units of micro, small, and medium is self-employed businesses. Thus, MSMEs are like the engine of the Indonesian economy which contributes greatly, especially to increasing economic growth, providing employment opportunities, creating innovation industries, and equalizing economic growth in Indonesia.

Micro, small, and medium enterprises are also sector efforts that have been proven to be tough in facing various crises that hit Indonesia, even during the Covid-19 pandemic. Amid the crisis that hit and caused many large companies to be affected, it was precisely business micro, small, and medium still exist and their numbers continue to increase as shown by the table following.

Table 2.
Number of Micro, Small and Medium Enterprises in Indonesia 2014-2021

Year	Number of Micro, Small and Medium Enterprises
2014	57,900,000
2015	59,300,000
2016	61,700,000
2017	62,900,000
2018	64,170,000
2019	65,470,000
2020	64,200,000
2021	65,000,000

Source: Ministry of Cooperatives and SMEs of the Republic of Indonesia, 2020

The Table 2 shows that from 2014 until 2021, the number of businesses micro, small, and medium-sized businesses continued to increase, where the amount of business most happened in 2019, reached 65.47 million units. In 2020 the number of business units micro, small, and medium enterprises in Indonesia experienced a decline, however However, the decrease is not as significant as it is possible to decline that's the impact of the pandemic Covid-19. Conditions decline in business units micro, small, and medium without delay, in 2021 the number of business units will increase again as much 800,000 units so that the number of business units in the year the reach another 65 million MSME units. Ascension's number of business units shows that the existence of micro, small, and medium enterprises in Indonesia keeps the Indonesian economy stable even though it

experiences a decline, because of business micro, small, and medium enterprises tend to be flexible and able to survive in the face of economic dynamics.

The Covid-19 pandemic that occurred in Indonesia and the revolution of Industry 4.0 have forced man to transform all sides of life, including the activity economy to survive and carry on its existence. The middle digital era developed felt stronger since The Covid-19 pandemic hit Indonesia, where the perpetrator's business must adapt to habits new especially in utilising technology information and communication. The existence of the digital era is encouraging business micro, small, and medium to create a business model new, and integration between sector businesses, as well as changes to its business model (Kumala, 2022).

The digital era in the field economy started in the 1980s. The use of personal computers (PC) and the internet for efficient business began with the development of trading electronic or we know with e-commerce terms. The emergence of a new digital economy era is marked by the existence of mobile technology and internet access has become opposition separately for the Indonesian government to create policies that can push sector businesses micro, small, and medium especially sector business micro and small For can adapt digitalization in push existence his business.

Indonesia is one of the countries that has its potency for the development digital economy. In the results of his research, Google found that a potency amount Indonesian internet users are one of them supporter Internet development in Indonesia. According to Kinsey & Company in Kumala (2022), other supporting facts development economy in Indonesia include: (1) Indonesia is estimated to own a large market share For online trading, amounting to 5 billion For formal online trading and 3 billion For informal online trading; (2) in 2017 Indonesia estimated own more from 30 million online buyers; (3) Estimated Indonesia's digital economy in 2025 will create 3.7 million work additional; (4) economics digital predicted will produce growth income up to 80 percent taller For business small and medium; and (5) economics digital- based provides additional 2 percent per year in GDP growth with increase level broadband penetration and usage digital technology.

Ministry of Cooperatives and Micro, Small, and Medium Enterprises mentioned that of 65 million business micro, small, and medium in Indonesia, as much as 17.25 million, or about 26.5 percent were connected to the digital ecosystem. Based on this, it can be

concluded that the use of information and communication technology in the context of digitalization has not run optimally or is still difficult to implement in the entire MSME sector, especially in micro and small businesses. This is in line with research conducted by (Infithor, 2019) which found that the adoption of innovation through the use of technology by MSME actors in Kampung Shoes is still difficult because these MSME business actors are hampered by several aspects in the use of information and communication technology, such as the ability to conduct technology information and communication (because constrained costs), knowledge and experience in using technology information and communication, and low skills in mastering technology information and communication.

The importance of digitalization in business micro, small, and medium is in line with the development acceptance and choice public for shopping online. Is digitalization expected can increase productivity in the end besides increasing sales and increasing mark sell to get it to compete with product foreign, but also possibly creates a field more work-wide for society. Tedjasukmana Head of Corporate Google Indonesia explained that 36 percent of business micro, small, and medium enterprises in Indonesia are still offline. Of the 64 percent who have internet accessibility, 37 of them own basic online skills, 18 percent capable middle, and 9 percent own ability advanced online businesses. Besides this based on data from the Ministry of Cooperatives and Micro, Small and Medium Enterprises there are 55 to 56 million existing businesses in Indonesia, however, around 75,000 to 100,000 have websites. If calculated, then only There is around not enough than 1 percent of businesses micro, small, and medium have websites. Lestari & Suman (2017) stated that business micro, small, and medium who use digital technology can raise income by 80 percent, 17 times more possibly become innovative, opportunity become more competitive internationally, and 1.5 times more possibly increase chance work.

Based on the description above, then need done studies more carry on related challenges and efforts application of digitalization in the sector business micro, small, and medium, remember composition sector makes a huge contribution to the economy of Indonesia. Study This aims to find the answer to problem following: (1) What just challenges businesses micro, small, and medium in applying digitization?; (2) what effort or necessary steps done government to push enhancement application digitalization by business micro, small, and medium in Indonesia? From the results of this research, it is

hoped that a reference solution will be found to increase the application of digitalization by micro and small business actors in Indonesia, so that the application of digitalization can be more widespread, especially in the micro and small business sectors and the impact of digitalization can be felt in small communities.

LITERATURE REVIEW

A. Micro, Small, and Medium Enterprises

According to Law Number 20 of 2008 concerning Micro, Small, and Medium Enterprises, micro businesses are productively owned by individuals and/or individual business entities that meet the criteria for micro-enterprises as regulated in this law, where the criteria for a micro business are to have maximum assets of 50 million rupiahs and a maximum turnover of 300 million rupiahs. Meanwhile, small businesses are productive economic businesses that stand, alone and are carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part, either directly or indirectly, of medium or large businesses that meet the criteria for saha small as intended in this law, in where the criteria for a small business are businesses that have assets of more than 50 million rupiah to 500 million rupiah and a turnover of more than 300 million rupiah to 2.5 billion rupiah.

Temporary that's it, you guys medium-sized businesses are productive economic businesses that stand alone, which are carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part of either directly or indirectly with the business. small or large businesses with the number of net assets or annual sales proceeds as regulated in Law Number 20 of 2008, in which the criteria for a medium business is a business that has assets of more than 500 million rupiahs to 10 billion rupiahs and turnover of more than 2.5 billion rupiahs to 10 billion rupiahs.

B. Digitalization

According to Sukmana in Erwin (2020), digitalization is the media process of form printed, audio, or video becoming digital form. Temporarily according to Muhasim (2017), the development of digital technology results from the manipulation of reason, thought, and intelligence reflected by humans in progress knowledge further knowledge can benefit all aspects of life human.

Business digitalization micro, small, and medium, or the process of changing business transactions from conventional systems to digital systems is something that cannot be avoided. This is because of the various conveniences offered, especially to business people micro, small, and medium. Efforts carried out by business actors micro, small, and medium through the use of communication and information technology certainly provide many benefits, especially if digital platforms are used to promote or sell goods and services. Among these benefits are:

1. Increasing Market Access. Through business digitalization micro, small, and medium allow business actors to have a wider marketing reach, not only to remote corners of the country, but also to reach markets abroad.
2. Increasing Competitiveness. The use of the concept of competitiveness is now starting to be widely applied in the context of measuring the role and performance of businesses micro, small, and medium. This condition shows a shift in perspective regarding the role of business Micro, small, and medium enterprises were originally seen more in terms of their contribution to increasing employment opportunities and reducing poverty, to the perception that business Micro, small, and medium enterprises also have an important contribution as a source of export growth, especially manufactured goods, and growth in gross domestic product (GDP). Competitiveness indicators in the form of productivity, output growth, and market share can be increased through digitalization implemented by business actors micro, small, and medium.
3. Increasing Production Capacity and Cost Efficiency. Problems faced by businesses micro, small and medium are limited production capacity due to low capability (processability) and production efficiency. By using digital technology in agriculture through the e-farming or digital farming program initiated by BI, for example, you can increase production capacity and minimize costs.

RESEARCH METHODS

Research is carried out descriptively or qualitatively by reviewing literature or journals related to business research micro, small, and medium.

RESULTS AND DISCUSSION

A. Challenge Application Digitalization by Micro, Small and Medium Enterprises in Indonesia

The existence of digital transformation in the economic sector, or what is better known as the digital economy, has had a significant impact on Indonesia's economic growth. In 2022, Indonesia's digital economy is worth about US\$77 billion and estimated will touch US\$130 billion by 2025 with e-commerce as the pusher main. The sales value of dirty goods and services in a period certain or more known by the term GMV (Gross Merchandise Value) indicates that the e-commerce sector is the sector with the largest GMV in Indonesia in 2022, namely amounting to US\$59 billion. Then other digital economy sectors, namely transportation and food delivery services, travel ticket booking, and online media, each have a GMV of under US\$ 10 billion (E-Conomy Sea 2022 Report, Through the Waves, towards a Sea of Opportunities, 2022). This shows that skills in using digital platforms can no longer be avoided, both by consumers and business entrepreneurs micro, small, and medium to continue to exist and be able to compete.

Besides having an impact positive to the Indonesian economy, the digital economy also brings challenges, especially for entrepreneurs' businesses micro, small, and medium, especially businessmen micro, and entrepreneurs small that moment this still not yet lots utilises digital developments in the activity of its economy. Sari et al. (2020) stated that there are five challenges business small in the digital era, including: (1) The increasingly advanced and sophisticated digital transformation brings its own fears for small business actors if the transformation they carried out was not as expected or actually failed; (2) like technology that requires society to be adaptive so public or today's consumers also demand products and services that are fast and practical , so that consumer will leave If business No own matter said; (3) low education, skills and experience as well as access to information (Saribu , 2017); (4) a society that is always changing or dynamic both in terms of tastes and needs causes business actors to be more creative and innovative in creating or providing products and services, and being able to think outside the box of the box in creating something unusual or unique; (5) increasingly high competition due to technological advances encouraging cooperation between business people, even through cyberspace.

Besides that, Widagdo (2021) in his research finds that the inhibiting factor in implementing digitalization efforts is the low interest and awareness of micro business

actors in keeping up with current developments, especially micro business actors consisting of housewives and the elderly, lack of knowledge of human resources, in this case including lack of knowledge of the benefits of digitalization on productivity. business, lack of knowledge of using smart telephones in daily economic activities, as well as limited capital which in this case is related to limited facilities and infrastructure owned.

Research conducted by Saifullah in Infithor (2019) found that the use of information technology by the business sector micro, small, and medium is still not optimal and difficult to do. This thing because in part big perpetrator businesses micro, small, and medium own low education. Besides that, the lack of learning at school-related technology information and communication makes the perpetrators business This No can adapt to development technology information and communication. Found that the reason the main perpetrators businesses micro, small, and medium do want to study return-related technology information and communication is because factor age. Besides capabilities, access of actors' business to capital is also relatively low.

Based on the explanation above can is known that the digital economy or use of communication and information technology has a positive impact, but on the other hand there are various challenges in the application of digitalization to micro, small, and medium enterprises, especially business solutions must be found for micro and small businesses, so that digital adaptation can be carried out as a whole by the business sector, which will have an impact on increasing business productivity, employment and equal distribution of economic prosperity.

B. Effort Application Digitalization by Micro, Small, and Medium Enterprises in Indonesia

In this era of Industrial Revolution 4.0, MSMEs are required to be able to implement digitalization in their daily activities to increase their productivity, both technology in terms of production, distribution, marketing, and systems payment (Devi, 2022). Based on the challenges described previously, then required recommendations that can be used to increase the implementation of digitalization by businesses micro, small, and medium enterprises, especially micro and small businesses, so that digitalization can be carried out as a whole and its impact can be felt equally by all levels of society.

To accelerate business development micro, small, and medium amid the rapid development of digital technology the government has taken many steps to optimize productivity business micro, small, and medium through Go-Digital. In between steps the is National Movement Proudly Made in Indonesia. This movement was initiated by the government where millions of businesses micro, small, and medium are already on boards of various e-commerce platforms, and business actors in micro, small, and medium enterprises are given stimulus such as coaching, promotions, disbursement of loans from the Association of State-Owned Banks, as well as placement in the government procurement e-catalog.

Since Covid-19 broke out, the Indonesian Government has always carried out adaptive responses to face dynamic situations. Through the Recovery Program Economy Nationally, the government has attempted to integrate various steps to minimize the impact of Covid-19 on the economy, because apart from handling health, handling the economic crisis as a domino effect of the health crisis is one of the main dimensions that must be considered. By allocating a budget of IDR 191.13 trillion in 2021 for the National Economic Recovery Program for Business Support Micro, Small, and Medium Enterprises and Corporations, the momentum of economic recovery can be maintained and quite a few levels of the business world can continue to maintain their businesses after the onslaught of the Covid-19 pandemic.

The Indonesian government has long recognized the importance of business digitalization micro, small, and medium. To support this and the shift in community behavior patterns towards digitalization, the government has initiated and implemented the construction of various physical and digital infrastructure facilities, including the construction of the Palapa Ring fiber optic network, BTS towers, and internet networks in 3T areas (Frontier, Remote, and Disadvantaged), expansion of 4G areas, development of 5G systems, launch of the SATRIA multifunction satellite, construction of several national data centers, as well as training facilities for digital technopreneurs and digital talent.

Bank Indonesia has to take a role in digitalization in Indonesia. Three pillars of business development of micro, small, and medium Banks of Indonesia (BI) itself consist of increasing production capacity, cost efficiency, and market expansion. One of the program implementations of these three pillars is the MSME digitalization program which is expected to encourage domestic MSMEs to become stronger. The MSME digitalization

program initiated by BI itself consists of e-farming, e-commerce, financing support, and e-payment.

See steps adaptation is carried out government related condition digitalization is not can avoided by the perpetrators effort, then possible recommendations given in effort implementation of digitalization by actors business micro, small, and medium are: (1) Policy or possible regulations push adoption digital economy, e.g through relief tax; (2) government in matter this service related can work the same with college tall For stage trainings or in-house workshops frame enhancement understanding literacy digitalization, for example related method use of digital platforms, social media, and usage technology in activity transaction finance; (3) government can bridge Work with the perpetrators business with party banking For do making account and QRIS creation; (4) government Keep going do improvement and expansion facilities and infrastructure technology information and communication, e.g with expand internet network to the 3T area; and (5) government providing a complaint and coaching platform business micro, small, and medium online.

CONCLUSIONS AND RECOMMENDATIONS

There is various challenge in application digitalization in business micro, small, and medium in Indonesia, including (1) Low level of education, skills, and experience as well as access to information; (2) low interest and awareness of micro business actors in keeping up with current developments; (3) lack of knowledge of the benefits of digitalization on business productivity; (4) lack of knowledge of using smart telephone in daily economic activities; (5) limited capital, which in this case is related to limited facilities and infrastructure owned; and (6) lack learning at school-related technology information and communication.

Temporary that's it efforts can be made to frame application digitalization business micro, small, and medium in Indonesia including (1) Policy or possible regulations to push the adoption of the digital economy; (2) government in the matter of this service related can work the same with college tall for stage training or in-house workshops frame enhancement understanding literacy digitalization, for example, related method use of digital platforms, social media, and usage technology in activity transaction finance; (3) government can bridge Work with the perpetrators business with party banking For do making account and QRIS creation; (4) government Keep going do improvement and

expansion facilities and infrastructure technology information and communication, e.g with expand internet network to the 3T area; and (5) government providing a complaint and coaching platform business micro, small, and medium online.

REFERENCES

- Bappenas. (2020). Policy Study for Mitigating the Impact of Covid-19 on MSMEs: Survey of Business Recovery Needs for Indonesian MSMEs. 1–59.
- E-economy sea 2022 report, Through the waves, towards a sea of opportunity. (2022). https://services.google.com/fh/files/misc/e_economy_sea_2022_report.pdf
- Infithor, M. F. (2019). Analysis of Adaptation of the Use of Information Technology on the Performance of MSMEs in Malang City. FEB UB Student Scientific Journal, 7(2), 16. <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/6039>
- Kumala, SL (2022). Development of a Digital-Based Economy in Indonesia. Journal of Economics and Regional Science, 1(2), 109–117. <https://doi.org/10.52421/jurnal-essence.v1i2.190>
- Lestari, VD, & Suman, A. (2017). Analysis of the Influence of Electronic Commerce on the Development of Micro and Small Enterprises. Jimfeb Undip, 1(1), 4–19.
- Muhasim, M. (2017). Influence Digital Technology against Motivation Study Participant Educate. Palapa, 5(2), 53-77.
- Pratiwi, IA M, & Ida Ayu Gde Dyas. (2022). Push Application Digitalization in Micro and Small Enterprises in Indonesia. E- Journal of Development Economics, Udayana University, 11 (10). <https://ojs.unud.ac.id/index.php/eep/article/view/94328>
- Sari, R., Sayadi, M. H., & Hildayanti, S. K.(2020). Training in Facing Small Business Challenges in the Digital Era for Small Business Actors in Kenten Palembang. Jurdimas (Journal of Community Service), 3(2), 87–92.
- Saribu, DS (2017). MSME Business Challenges and Solutions in the New Normal Era. 207–217.
- Widagdo, DDP (2021). In the Context of Empowering Micro Enterprises in the City of Semarang.

ABOUT THE FIRST AUTHOR/S

Hapsari Wiji Utami is a lecturer at the Economics Study Program, Faculty of Economics and Islamic Business, UIN Sunan Ampel Surabaya. Born in Surabaya (East Java), March 8, 1986. She completed his primary and secondary education in Ngawi Regency. She then pursued higher education at Dr. Soetomo University Surabaya and received a Bachelor of Economics (S.E.) degree in the Development Economics Study Program in 2007. She continued his studies at Airlangga University Surabaya and received a Master of Science in Economics (M.SE.) in

the Master of Economics Study Program in 2015. She has published several research results, including research entitled: 1) The Effect of Economic Growth, Minimum Wage, Open Unemployment Rate and Education on the Number of Poor People in East Java Province; 2) Analysis of the influence of the banking sector on economic growth in Indonesia for the period 2001-2015

ABOUT THE SECOND AUTHOR/S

Debby Nindya Istiandari is a lecturer at the Economics Study Program, Faculty of Economics and Islamic Business UIN Sunan Ampel Surabaya. Born in Majalengka (West Java), December 14, 1995. She completed his primary and secondary education in Majalengka Regency. She then pursued higher education at Siliwangi Tasikmalaya University and received a Bachelor of Economics (S.E.) degree in the Development Economics Study Program in 2018. In that year, She continued his studies at Jenderal Soedirman University and received a Master of Economics (M.E.) in the Master of Economics Study Program in 2020. She has published several research results, including research entitled: 1) The Effect of Population, Average Length of Schooling, and Life Expectancy on Poverty in Majalengka Regency; 2) The Effect of Sectoral GRDP, Human Resource Quality, and Population Growth on Open Unemployment in Java Island