

UMKM DIGITALISATION: A BRIDGE TO ECONOMIC INCLUSION IN THE DIGITAL ECONOMY LANDSCAPE

Lucky Mahesa Yahya *

Universitas Andalas

luckymahesayahya@eb.unand.ac.id

Melyana R Pugu

Universitas Cenderawasih

puguratana@yahoo.com

Abstract

Digitalisation of MSMEs plays an important role in promoting economic inclusion in the digital era. This study aims to analyse the potential and challenges of MSME digitalisation, and identify strategies to realise this potential. The method used is a literature study. The results show that digitalisation can help MSMEs expand market access, improve efficiency, and create new business opportunities. However, MSMEs also face various challenges, such as the digital divide, lack of digital literacy, and limited access to resources. To overcome these challenges, collaboration between the government, private sector, and community is needed to create an ecosystem conducive to MSME digitalisation. Recommended strategies include providing digital infrastructure, improving digital literacy, access to finance and resources, as well as regulations that support innovation and data protection. With an inclusive and comprehensive approach, digitalisation of MSMEs can contribute to poverty alleviation, reduction of economic disparities, and sustainable economic development.

Keywords: digitalisation, MSMEs, economic inclusion, digital economy, sustainable development

Introduction

Micro, Small, and Medium Enterprises (MSMEs) have a very important role in the Indonesian economy. According to data from the Ministry of Cooperatives and Small and Medium Enterprises (2021), MSMEs contribute 61.07% to Indonesia's Gross Domestic Product (GDP) and absorb 97% of the total workforce. MSMEs not only serve as the backbone of the national economy, but also as a source of job creation, poverty alleviation, and income distribution. (Bagrii et al., 2024).. In addition, MSMEs also play a role in driving the regional economy, encouraging innovation and entrepreneurship, and strengthening national economic resilience in the face of external shocks. However, amidst the rapid development of the digital economy, MSMEs face various challenges in adapting to the changing business landscape (Langelo et al., 2024). (Langelo et al., 2024)..

One of the main challenges faced by MSMEs is access to capital. Many MSMEs find it difficult to obtain loans from formal financial institutions due to complicated requirements, lack of collateral, and high interest rates. This makes it difficult for MSMEs

to expand their businesses and increase production capacity. Another challenge faced by MSMEs is access to markets and technology. Many MSMEs still rely on local markets and have not been able to penetrate national or international markets. (Khadzhynova, 2022).. In addition, MSMEs are also often left behind in terms of technological mastery, both in the production and marketing processes. This makes it difficult for MSMEs to compete with large enterprises that have greater resources and more advanced technology. Therefore, support from the government and various related parties is needed to assist MSMEs in facing these challenges, so that MSMEs can continue to grow and make a greater contribution to the Indonesian economy. (Jahan & Zhou, 2023)..

In addition, the COVID-19 pandemic has accelerated the pace of digitalisation and significantly changed consumer behaviour. Mobility restrictions and shifting consumer preferences to online platforms have impacted MSMEs that rely on offline transactions. This further emphasises the importance of digitalisation for MSMEs to survive and thrive in the digital economic landscape.

Digitalisation of MSMEs is not only important for business continuity, but also plays a role in realising economic inclusion. Economic inclusion refers to equal participation and access to economic opportunities for all. By adopting digital technology, MSMEs can increase access to a wider market, including consumers in remote areas, as well as gain access to more inclusive digital financial services. (Ahmed, 2024).

Although the government has launched various programmes to support the digitalisation of MSMEs, such as the National Movement for MSMEs Go Online and digital literacy training assistance, there are still many MSMEs that have yet to fully tap into the potential of the digital economy. More comprehensive and collaborative efforts from various stakeholders, including the government, private sector, and academia, are needed to develop an ecosystem conducive to MSME digitalisation. (Ozili, 2024).

Based on this background, this study examines the role of digitalisation of MSMEs in realising economic inclusion in Indonesia. It will analyse the current condition of MSMEs, the challenges faced in adopting digital technology, and the strategies and policies needed to effectively promote MSME digitalisation.

Research Methods

The study in this research uses literature. Literature research method is a research method conducted by collecting, reading, and analysing various literature sources relevant to the research topic. The literature sources used can be books, scientific journals, articles, research reports, or other sources that can be academically accounted for. (JUNAIDI, 2021); (Abdussamad, 2022). The purpose of literature research is to gain a deep understanding of the topic under study, identify gaps in previous research, and develop a theoretical framework that can be used for further research. In conducting literature research, researchers must be able to select relevant sources, evaluate the quality and credibility of sources, and integrate findings from various sources to produce a comprehensive and coherent synthesis. (Wekke, 2020).

Results and Discussion

Current Condition of MSMEs in Indonesia

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia have experienced significant growth in recent years. According to data from the Ministry of Cooperatives and Small and Medium Enterprises (2021), the number of MSMEs in Indonesia reached 64.2 million units or around 99.99% of the total business units in Indonesia. The MSME sector also absorbs around 97% of the total workforce in Indonesia, so it has a very important role in creating jobs and reducing unemployment. (Hossain, 2022).

However, MSMEs in Indonesia also face various challenges, especially during the Covid-19 pandemic. Based on a survey conducted by the Central Statistics Agency (BPS) in 2020, 82.9% of MSMEs experienced a decrease in revenue due to the pandemic. In addition, 63.9% of MSMEs also had difficulty obtaining raw materials and 37.9% had difficulty making sales. This shows that MSMEs are highly vulnerable to external shocks and need support from various parties to survive and thrive. (Mpofu, 2023).

The Indonesian government has issued various policies to help MSMEs during the pandemic, such as interest subsidies, credit payment delays, and direct cash transfers. However, the effectiveness of these policies still needs to be further evaluated. On the other hand, the development of digital technology has also opened up new opportunities for MSMEs to improve access to markets and resources. Many MSMEs have started utilising e-commerce platforms and social media to market their products online. (Zayats & Yakob, 2024)..

Overall, the current condition of MSMEs in Indonesia still faces various challenges, but also has great potential to grow. Synergy and collaboration from various parties, including the government, private sector, and the community, are needed to create an ecosystem that is conducive to the growth of MSMEs. With the right support and innovative strategies, MSMEs are expected to become the motor of Indonesia's inclusive and sustainable economic growth.

MSME Challenges in Facing the Digital Economy

The development of the digital economy has brought significant changes to the business landscape, including for Micro, Small and Medium Enterprises (MSMEs). While the digital economy opens up new opportunities for MSMEs to increase access to markets and resources, it also presents challenges that must be faced. One of the main challenges is the ability of MSMEs to adapt to digital technology. Many MSMEs still use traditional business methods and are not familiar with the use of digital technology, such as e-commerce, social media, or other business applications. This can limit the ability of MSMEs to compete with larger and more technologically sophisticated companies. (Fat'yanov et al., 2020)..

Another challenge is access to adequate digital infrastructure. While internet penetration in Indonesia continues to increase, there is still a digital divide between urban and rural areas. MSMEs located in areas with poor or expensive internet connectivity may

find it difficult to utilise digital platforms to grow their businesses. In addition, limited access to technological devices, such as computers or smartphones, can also be an obstacle for MSMEs in adopting digital technology. (Anacka & Lechman, 2023)..

Cybersecurity is also an increasingly important challenge in the digital economy. MSMEs are often targeted by cyberattacks, such as malware, phishing, or data theft, as they are perceived to have weaker security systems than large enterprises. Cyberattacks can cause significant financial losses for MSMEs, as well as damage reputation and customer trust. Therefore, MSMEs need to increase their awareness and ability to manage cybersecurity risks. (Hossain, 2022).

To overcome these challenges, support and collaboration from various parties are needed. The government can play a role in providing adequate digital infrastructure, as well as providing training and mentoring for MSMEs in adopting digital technology. In addition, collaboration between MSMEs and technology companies and financial institutions can also help MSMEs access the resources and expertise needed. With the right support and adaptive strategies, MSMEs are expected to utilise the opportunities offered by the digital economy to grow and develop sustainably.

MSME Digitalisation Strategy

In facing the digital economy era, Micro, Small and Medium Enterprises (MSMEs) need to develop effective digitalisation strategies to improve competitiveness and business growth. One important step in the MSME digitalisation strategy is the adoption of digital technologies that are relevant to business needs. This can include the use of e-commerce platforms to expand market reach, the utilisation of social media for marketing and customer engagement, and the use of business applications to improve operational efficiency. In adopting digital technology, MSMEs need to consider the scale of the business, target customers, and available budget. (Rahayu et al., 2023)..

MSME digitalisation strategies should also include human resource capacity building. MSME owners and employees need to be equipped with the necessary knowledge and skills to operate and utilise digital technology effectively. Training and mentoring can be done through programmes organised by the government, business associations or educational institutions. In addition, MSMEs can also utilise online resources, such as tutorials or webinars, to improve digital competencies independently. (Cai et al., 2024)..

Collaboration with strategic partners is also an important part of the MSME digitisation strategy. MSMEs can establish partnerships with technology companies, logistics service providers, or financial institutions to access the resources and expertise needed in the digitisation process. These collaborations can help MSMEs face technological and financial challenges, and open up new opportunities for business innovation and growth. (Moreno et al., 2023)..

Finally, MSME digitalisation strategies must be accompanied by good data management and enhanced cybersecurity. MSMEs need to collect, analyse and utilise

customer and transaction data to make better business decisions and provide more personalised services. (Derici, 2024). However, MSMEs must also ensure that such data is protected from cybersecurity threats through the use of adequate security technologies and best practices in managing cyber risks. By implementing a comprehensive and adaptive digitalisation strategy, MSMEs can take advantage of the opportunities offered by the digital economy to improve business efficiency, innovation and growth in the long run.

Impact of MSME Digitalisation on Economic Inclusion

Digitalisation of MSMEs has a significant impact on economic inclusion, which is an effort to realise wider participation of all levels of society in economic activities. By adopting digital technology, MSMEs can expand their market reach, both geographically and demographically. E-commerce and social media platforms allow MSMEs to reach new customers, including those in remote areas or those with online shopping preferences. This can increase economic inclusion by providing greater access to previously hard-to-reach consumers. (Maria, 2020).

In addition, digitalisation of MSMEs can also drive economic inclusion through job creation and new entrepreneurial opportunities. By utilising digital technology, MSMEs can improve operational efficiency and reduce costs, allowing them to employ more people. In addition, easy access to digital marketplaces and online resources can encourage new entrepreneurs, especially from communities that previously faced barriers to starting a business, such as women, young people, or those living in rural areas. (Siregar et al., 2021).

However, to realise the positive impact of MSME digitalisation on economic inclusion, efforts are needed to address the existing digital divide. The digital divide refers to differences in access, skills and utilisation of digital technologies between different groups of people. The government, private sector and educational institutions need to work together to provide adequate digital infrastructure, especially in remote areas, and provide training and mentoring for MSMEs and communities to improve their digital literacy. (Mirgorodskaya et al., 2020).

In the long run, digitalisation of MSMEs can contribute to more inclusive and sustainable economic growth. By improving the competitiveness and productivity of MSMEs, as well as expanding community participation in the digital economy, digitalisation can help reduce economic disparities and create fairer opportunities for all. However, these efforts require commitment and collaboration from various stakeholders, as well as policies that support the development of an inclusive digital ecosystem. (Wegner-Kozlova & Guman, 2020).. With a comprehensive and inclusive approach, the digitalisation of MSMEs can be a catalyst for a more equitable and sustainable economy for all.

Furthermore, it is also important to consider the aspect of data protection and security in the digitalisation process of MSMEs. As more MSMEs adopt digital technology,

the risk of data breaches and cyberattacks also increases. Therefore, there is a need to increase MSMEs' awareness and capability in managing data security, as well as clear regulations to protect consumer and business data. The government and private sector can work together to provide MSMEs with guidance, training, and affordable cybersecurity solutions. (Rysina, 2021).

In addition, the digitalisation of MSMEs also needs to pay attention to environmental sustainability. With the increase in digital activities, energy consumption and the use of electronic devices will also increase. Therefore, it is important for MSMEs to adopt environmentally-friendly practices, such as the use of renewable energy, proper e-waste management, and business process optimisation to reduce carbon footprint. These initiatives not only contribute to environmental sustainability, but can also be a plus for MSMEs in attracting consumers who are increasingly aware of sustainability issues. (Zhanbayev et al., 2020)..

As such, digitisation of MSMEs has great potential in driving economic inclusion, by expanding market access, creating jobs, and opening up new entrepreneurial opportunities. However, realising this potential requires collaborative efforts from various stakeholders in addressing the digital divide, improving digital literacy, ensuring data security, and encouraging sustainable business practices. With an inclusive and comprehensive approach, digitalisation of MSMEs can be the key to creating a more equitable, resilient and sustainable economy in the digital era. This will not only benefit MSMEs and society, but will also contribute to the achievement of broader development goals, such as poverty alleviation, gap reduction, and inclusive economic growth.

Conclusion

Digitalisation of MSMEs has great potential in driving economic inclusion in the digital era. By adopting digital technology, MSMEs can expand market access, improve operational efficiency, and create new business opportunities. This can help MSMEs to compete more effectively, increase income, and create jobs, thereby contributing to poverty alleviation and reducing economic disparities. However, realising this potential requires collaborative efforts from various stakeholders in addressing challenges faced by MSMEs, such as the digital divide, lack of digital literacy, and limited access to resources.

The government, private sector and community need to work together in creating an ecosystem conducive to the digitalisation of MSMEs. This includes the provision of adequate digital infrastructure, training and mentoring programmes to improve digital literacy, access to financing and resources, and regulations that support innovation and data protection. In addition, the digitalisation of MSMEs also needs to consider sustainability, by adopting environmentally-friendly business practices. With an inclusive and comprehensive approach, the digitalisation of MSMEs can be a bridge to a more equitable, resilient and sustainable economy, where the benefits of economic growth can be felt by all levels of society.

References

- Abdussamad, Z. (2022). *Qualitative Research Methods Book*. Query date: 2024-05-25 20:59:55. <https://doi.org/10.31219/osf.io/juwxn>
- Ahmed, E. M. (2024). Developing Digital Inclusion Through Globalisation and Digitalisation. *Advances in Computer and Electrical Engineering*, Query date: 2024-12-16 20:13:34, 1-20. <https://doi.org/10.4018/979-8-3693-4111-7.ch001>
- Anacka, H., & Lechman, E. (2023). Digitalisation and digital skills development patterns. Evidence for European countries. *The European Digital Economy*, Query date: 2024-12-16 20:13:34, 101-119. <https://doi.org/10.4324/9781003450160-9>
- Bagrii, K., Ciobanu, G., & Maksymiuk, N. (2024). ACCOUNTING IN THE CONDITIONS OF DIGITALISATION OF THE ECONOMY. *GLOBAL DIGITAL TRENDS AND THEIR IMPACT ON NATIONAL ECONOMIC PROGRESS*, Query date: 2024-12-16 20:13:34. <https://doi.org/10.46489/gdtatione-05-24-27>
- Cai, H., Wang, Z., Ji, Y., & Xu, L. (2024). Digitalisation and innovation: How does the digital economy drive technology transfer in China? *Economic Modelling*, 136(Query date: 2024-12-16 20:13:34), 106758-106758. <https://doi.org/10.1016/j.econmod.2024.106758>
- Derici, S. (2024). Digitalisation Concept and the Historical Evolution of Digitalisation. *Advances in Computer and Electrical Engineering*, Query date: 2024-12-16 20:13:34, 90-106. <https://doi.org/10.4018/979-8-3693-4111-7.ch006>
- Fat'yanov, A., Shagieva, R. V., & Lakhtina, T. (2020). Digitalisation and Digital Economy: Issues of Legal Regulation and Its Prospects. *Lecture Notes in Networks and Systems*, Query date: 2024-12-16 20:13:34, 695-704. https://doi.org/10.1007/978-3-030-39797-5_68
- Hossain, M. (2022). Digital Bangladesh Vision and the Current State of Digitalisation. *Digital Transformation and Economic Development in Bangladesh*, Query date: 2024-12-16 20:13:34, 29-56. https://doi.org/10.1007/978-981-19-2753-9_3
- Jahan, N., & Zhou, Y. (2023). Covid-19 and digital inclusion: Impact on employment. *Journal of Digital Economy*, 2(Query date: 2024-12-16 20:13:34), 190-203. <https://doi.org/10.1016/j.jdec.2024.01.003>
- JUNAIDI, J. (2021). ANNOTATED QUALITATIVE RESEARCH METHODOLOGY JOHN W. CRESWELL. Query date: 2024-05-25 20:59:55. <https://doi.org/10.31237/osf.io/6kt5q>
- Khadzhynova, O. V. (2022). CORPORATE MODELS OF DIGITAL TRANSFORMATION OF ECONOMIC SECURITY SYSTEM. *Economy Digitalisation in a Pandemic Conditions: Processes, Strategies, Technologies*, Query date: 2024-12-16 20:13:34. <https://doi.org/10.30525/978-9934-26-194-7-19>
- Langelo, L., Ngangi, C. R., & Rengkung, L. R. (2024). Agro Digitalisation Capability Of The Umkm Sector In Bitung City In The Era Of Digital Agro Economy. *Journal of Applied Agroecotechnology*, 5(1), 37-51. <https://doi.org/10.35791/jat.v5i1.53993>
- Maria, C. (2020). Digitalisation in the Romanian Higher Education in the Present Digital Era. *Proceedings of the 2nd International Scientific and Practical Conference "Modern Management Trends and the Digital Economy: From Regional Development to Global Economic Growth" (MTDE 2020)*, Query date: 2024-12-16 20:13:34. <https://doi.org/10.2991/aebmr.k.200502.120>
- Mirgorodskaya, M. G., Rustamova, I. T., & Grachev, S. A. (2020). Digitalisation of Economy as the Economic Growth and Unemployment Risk Decrease Factor. *Proceedings of the 2nd International Scientific and Practical Conference "Modern Management Trends and the Digital Economy: From Regional Development to Global Economic*

- Growth" (MTDE 2020), Query date: 2024-12-16 20:13:34. <https://doi.org/10.2991/aebmr.k.200502.107>
- Moreno, A. D., López, M. del M. M., Limón, M. G., & Fernández, M. R. (2023). Digitalisation and the impact on the labour relations¹. *The European Digital Economy*, Query date: 2024-12-16 20:13:34, 83-100. <https://doi.org/10.4324/9781003450160-8>
- Mpofu, F. Y. (2023). Digital Financial Inclusion and Digital Financial Literacy in Africa: The Challenges Connected with Digital Financial Inclusion in Africa. *Advances in African Economic, Social and Political Development*, Query date: 2024-12-16 20:13:34, 123-147. https://doi.org/10.1007/978-3-031-31431-5_7
- Ozili, P. K. K. (2024). Digital Agency Theory of Financial Inclusion. *Advances in Computer and Electrical Engineering*, Query date: 2024-12-16 20:13:34, 53-69. <https://doi.org/10.4018/979-8-3693-4111-7.ch004>
- Rahayu, S. K., Budiarti, I., Firdauas, D. W., & Onegina, V. (2023). Digitalisation and informal MSMEs: Digital financial inclusion for MSME development in the formal economy. *Journal of Eastern European and Central Asian Research (JEECAR)*, 10(1), 9-19. <https://doi.org/10.15549/jeecar.v10i1.1056>
- Rysina, V. N. (2021). Digitalisation of the economy and digital technologies. *Management and Business Administration*, 1, 116-127. <https://doi.org/10.33983/2075-1826-2021-1-116-127>
- Siregar, C., Pane, M. M., Lake, S. C. J. M., & Fios, F. (2021). The Effectiveness of Learning Together Based on The Culture "Tok Tabua" and "Meup Tabua" in Learning Civic Education Class 6 Elementary School North Central Timor District. 2021 the 6th International Conference on Distance Education and Learning, Query date: 2024-12-16 20:04:44, 277-282. <https://doi.org/10.1145/3474995.3475042>
- Wegner-Kozlova, E. O., & Guman, O. M. (2020). Digitalisation of Environmental Monitoring as an Enabler of Circular Economy Transition. *Proceedings of the 2nd International Scientific and Practical Conference "Modern Management Trends and the Digital Economy: From Regional Development to Global Economic Growth" (MTDE 2020)*, Query date: 2024-12-16 20:13:34. <https://doi.org/10.2991/aebmr.k.200502.213>
- Wekke, I. S. (2020). *Qualitative Research Design*. Query date: 2024-05-25 20:59:55. <https://doi.org/10.31219/osf.io/4q8pz>
- Zayats, O., & Yakob, E. (2024). DIGITAL TRADE AS A NEW ECONOMIC APPROACH TO THE DIGITALISATION OF THE TRADE SECTOR. *UNU Herald. International Economic Relations And World Economy*, 51. <https://doi.org/10.32782/2413-9971/2024-51-5>
- Zhanbayev, R., Sagintayeva, S., & Abildina, A. (2020). Digitalisation of the Economy of Kazakhstan as a Factor of Innovative Development. *Proceedings of the 2nd International Scientific and Practical Conference "Modern Management Trends and the Digital Economy: From Regional Development to Global Economic Growth" (MTDE 2020)*, Query date: 2024-12-16 20:13:34. <https://doi.org/10.2991/aebmr.k.200502.159>