



The Influence of Digitalization on the Development of UMKM in Indonesia Post Covid-19

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Abstract

This research aims to understand the impact of digitalization on the development of micro, small, and medium-sized enterprises (UMKM) in Indonesia. The study also discusses the challenges in UMKM digitalization processes and the role of the government in facilitating UMKM digitalization. The research employs a qualitative descriptive method with a literature review approach, using secondary data. The findings indicate that digitalization significantly influences UMKM development post-COVID-19 pandemic. However, UMKM digitalization faces challenges related to human resources and technology investment costs. The government's role in UMKM digitalization is crucial, including providing infrastructure and supporting digital literacy to accelerate the process.

Keywords : Halal Investment, Sharia Capital Market, Sharia Economic Development.

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INTRODUCTION

The COVID-19 pandemic that has hit since the end of 2019 until mid-2023 has had a significant impact on various sectors, especially the global economy. In Indonesia, the impact has been felt greatly, especially on the micro, small, and medium enterprise (MSME) sector. As the backbone of the national economy, MSMEs play an important role in maintaining economic stability. Data shows that MSMEs contribute around 61% of Gross Domestic Product (GDP) and create 97% of jobs. However, the pandemic has forced the sector to face major challenges, including social restrictions, changes in people's consumption patterns, as well as declining purchasing power. Amidst these challenges, digitalisation is emerging as a potential solution to sustain MSMEs.

Digital transformation is one of the dominant trends accelerating changes in business patterns in various countries. Digitalisation refers to the use of digital technology to replace analogue or manual processes, enabling automation, operational efficiency, and wider access to global markets. Ritter and Pedersen (2020) define digitalisation as the ability to create, store, transfer and analyse digital data, which provides opportunities to overcome physical barriers in business. In the context of MSMEs, digitalisation offers various benefits such as cost efficiency, wider market reach, and adaptability to changing consumer needs. However, the implementation of digitalisation

In Indonesia, the digitisation of MSMEs has become increasingly relevant in the wake of the COVID-19 pandemic. The pandemic has not only changed the way society interacts, but also fuelled a shift in consumer preferences towards online shopping. A study conducted by Farhan Rizky et al. (2022) shows that digital marketing is a key strategy in helping MSMEs stay relevant in the post-pandemic era. In another study, Kamaruddin and Usman (2024) found that digitalisation through digital marketing significantly increased business profitability by expanding market reach to international consumers. This underscores the importance of digitalisation as a tool to mitigate the impact of the pandemic and create new opportunities for MSMEs.

However, despite its great potential, digital transformation in Indonesian MSMEs faces complex challenges. One of the main obstacles is the low level of digital literacy among MSME players. According to Octiva et al. (2024), many MSME players do not understand technology deeply, making it difficult to adopt complex digital systems. In addition, limited access to advanced technology, lack of capital for technology investment, and resistance to changes in organisational culture are additional obstacles. This resistance is often caused by uncertainty about the long-term benefits of digitalisation, especially for small MSMEs operating in remote areas.

The role of the government is crucial in accelerating the digital transformation of MSMEs in Indonesia. The government not only acts as a facilitator, but also as the main driver in providing adequate digital infrastructure. According to Wilestari et al. (2023), the development of technological infrastructure such as reliable and affordable internet networks is a crucial first step to support the digitalisation of MSMEs. The government is also expected to provide support through sustainable digital literacy education programmes. These programmes aim to increase MSME players' understanding of the benefits of digital technology, as well as how to integrate the technology into their business models. In addition, support in the form of fiscal incentives, easy access to funding, and reduced operational costs can also help accelerate the digital transformation process.

This study aims to explore the impact of digitalisation on the development of MSMEs in Indonesia post-COVID-19 pandemic. The main focus of this research includes how digitalisation affects the marketing, operational and competitive aspects of MSMEs. It also aims to identify the main challenges faced in the implementation of digitalisation, as well as analyse the government's role in supporting the process. Using a comprehensive literature review approach, this research not only examines the benefits and challenges of digitalisation, but also offers new insights into strategies that can be adopted to accelerate the digital transformation of MSMEs in Indonesia.

In an effort to answer this research question, this study draws on a number of relevant recent literatures. For example, a study by Damis and Harun (2023) revealed that digitalisation can increase MSMEs' revenue through wider market access and operational efficiency. In addition, a study by Leksono Putri Handayani et al. (2022) showed that digital payment systems provide additional benefits to MSMEs by speeding up transactions and reducing the risk of errors. This literature review shows that while digitalisation provides many opportunities, there is still an urgent need to address the structural barriers faced by MSMEs.

The novelty of this research lies in the analysis that integrates various aspects of digitalisation, including digital marketing, technological literacy, and government policies, to provide holistic guidance in addressing MSME challenges. This research also seeks to address the gap between previous literature that tends to focus on one aspect of digitalisation, such as marketing or infrastructure, by offering a more holistic approach. As such, this research provides not only theoretical contributions, but also practical recommendations for policymakers, MSME actors, and other stakeholders.

This research is relevant not only in the context of post-pandemic economic recovery, but also in supporting Indonesia's vision towards digital-based economic transformation. As a country with a growing population of internet users, Indonesia has great potential to integrate digitalisation into the MSME sector. However, realising this potential requires close collaboration between the government, private sector and academia. This collaboration is expected to create an inclusive and sustainable digital ecosystem, where all MSMEs, regardless of their size or location, can participate in the digital economy.

To conclude, digitalisation is not only a tool to survive the crisis, but also a catalyst for long-term growth. By utilising digital technology, MSMEs can improve efficiency, expand market access, and strengthen competitiveness. However, the success of this digital transformation depends on the ability of all parties to overcome existing challenges and create an enabling environment for technology adoption. This research seeks to provide a deeper understanding of how digitalisation can be a key driver for the development of MSMEs in Indonesia, as well as steps that can be taken to accelerate the process.

METHODS

This research uses a descriptive qualitative approach combined with a literature study, aiming to understand the influence of digitalisation on the development of MSMEs in Indonesia in the post-COVID-19 pandemic era. This method was chosen for its ability to explore the phenomenon by utilising relevant secondary data.

Secondary data was obtained from various reliable sources, including scientific journals, research reports, government publications, and other articles relevant to the topic of MSME digitalisation. The selection of data sources considered credibility and relevance to the research theme. For example, previous studies on digitalisation in business provide a framework for understanding the challenges and opportunities faced by MSMEs (Ritter & Pedersen, 2020; Damis & Harun, 2023). This process ensures that the data used supports the research arguments in an objective and comprehensive manner.

A literature analysis was conducted to identify trends, concepts and findings related to digital transformation in MSMEs. The literature includes key theories on digitalisation and empirical findings that underscore the impact of digitalisation on MSMEs' efficiency, marketability and profitability (Farhan Rizky et al., 2022; Kamaruddin & Usman, 2024). In addition, this review covers government policies that support digital transformation, such as the provision of technological infrastructure and digital literacy (Wilestari et al., 2023; Tambunan, 2023).

Data analysis was conducted using a thematic approach. The collected data were coded and grouped based on key themes, such as the effect of digitalisation on marketing, the challenges of technology adoption, and the role of government in supporting MSMEs. This analysis sought to explore emerging patterns and holistically assess the impact of digitalisation on MSME development (Octiva et al., 2024; Yolanda, 2024). This process draws on qualitative data analysis methods to ensure systematic and structured interpretation.

Validation was conducted by comparing findings from various sources to ensure consistency and reliability of the data. For example, statements about human resource challenges in digitisation were verified through a review of several studies that mentioned the lack of technological literacy among MSME actors (Aisyah et al., 2023; Ritter & Pedersen, 2020). This aims to improve the accuracy and relevance of the findings. This study did not use primary instruments such as questionnaires or interviews due to its focus on literature analysis. However, in-depth literature analysis serves as a tool to explore the relationship between digitalisation and MSME development.

RESULTS OF FINDINGS

The Effect of Digitalisation on MSME Development Post-Pandemic

Based on the results of the literature study analysis, digitalisation has proven to have a significant impact on the development of Micro, Small and Medium Enterprises (MSMEs) in Indonesia after the COVID-19 pandemic. Changes in marketing strategies that involve the use of digital technology have encouraged MSME players to adapt to the consumption patterns of people who have shifted to digital platforms.

Research conducted by Damis and Harun (2023) revealed that digitalisation is a key factor in increasing MSME revenue. This is because digitalisation allows businesses to reach a wider market through digital media without relying on traditional marketing methods such as door-to-door. Furthermore, Rizky et al. (2022) highlighted that digital marketing is not only a tool but also a vital business strategy in the face of people's online shopping habits that have grown significantly post-pandemic.

Efficiency and Profitability Through Digitalisation

Digitalisation not only impacts market access but also the operational efficiency of MSMEs. Research by Kamaruddin and Usman (2024) shows that the implementation of digital marketing contributes to increased business profitability. Through digitalisation, MSMEs are able to utilise online platforms to reduce operational costs and maximise revenue from a wider market.

In addition, digital payment systems are an integral part of MSME digitalisation. Handayani et al. (2022) noted that the use of cashless payment systems, such as e-wallets and other digital payments, facilitates transactions and improves customer experience. This capability becomes a competitive advantage for MSMEs, given the significant increase in the use of online transactions by the public during the pandemic.

Challenges in MSME Digitalisation

Despite the great benefits, digitisation in MSMEs is not free from challenges that must be overcome. Some of the main obstacles include limited technological knowledge, high initial investment costs, and organisational resistance to change (Octiva et al., 2024). The human resource factor is a significant obstacle, especially in finding individuals who have competence in information technology (Aisyah et al., 2023).

On the other hand, some MSME players still face financial challenges to adopt digital technology. These include costs for purchasing hardware, software and labour training. These challenges point to the need for further support in building the technical and financial capacity of MSME players.

Government's Role in Supporting MSME Digitalisation

The results of the analysis also highlight the importance of the government's role in facilitating the digitalisation of MSMEs. Wilestari et al. (2023) emphasised that the government has a big responsibility in improving technological infrastructure to accelerate the digitisation process. In addition, support in the form of digital literacy, funding, and business licence facilitation are urgent needs for MSMEs.

Tambunan (2023) added that digital literacy socialisation should be a priority for the government to address the technology knowledge gap among MSME players. Collaborative efforts between the government, community, and private sector are expected to accelerate the digital transformation of MSMEs, so that they are able to compete in an increasingly competitive digital era.

DISCUSSION

The Impact of Digitalisation on MSMEs in Indonesia

Digitalisation has proven to have a significant impact on the development of MSMEs, especially after the COVID-19 pandemic. This digital transformation provides great opportunities for MSMEs to expand market reach, improve operational efficiency, and create new growth opportunities. In this context, digitalisation is not only a tool, but also a strategy to survive the economic disruption caused by the pandemic (Damis & Harun, 2023; Farhan Rizky et al., 2022).

Research shows that digitalisation supports MSMEs in optimising marketing through digital media. Digital marketing, for example, allows businesses to utilise online platforms to attract a wider range of consumers. This is in line with findings that emphasise that changing consumer habits, such as shifting consumption patterns to e-commerce, encourage MSMEs to use effective digital marketing strategies (Kamaruddin & Usman, 2024). Thus, digitalisation not only increases business visibility but also provides opportunities to increase profitability.

Challenges of Digitalisation for MSMEs

Despite its many benefits, the implementation of digitalisation is not free from challenges. One of the main obstacles is the lack of understanding of technology among MSME players. Many micro and small businesses are still unfamiliar with digital technology, and thus face obstacles in adopting complex technologies (Octiva et al., 2024). This is compounded by the limited financial resources required for initial technology investments. Expenditure on hardware, software and training is often a heavy burden for MSMEs with limited capital (Aisyah et al., 2023).

Resistance to change is also a significant challenge. Some businesses are comfortable with their traditional methods and sceptical of the effectiveness of digital technology. Therefore, a mindset shift is needed among MSMEs to understand the long-term benefits of digitalisation. This factor not only reflects the individual aspect, but also shows the need for external support in the digital transformation process.

Government's Role in Supporting MSME Digitalisation

Digital transformation of MSMEs in Indonesia requires active intervention from the government. The government's role is crucial, especially in providing adequate technological infrastructure. Studies show that the availability of technological infrastructure, such as stable internet networks and accessibility of digital technology in remote areas, strongly supports the digitisation process (Wilestari et al., 2023).

In addition to infrastructure, the government needs to develop a comprehensive digital literacy training programme. Digital literacy is key in improving the capacity of MSMEs' human resources to optimally utilise technology. Socialisation campaigns and intensive training can help MSMEs understand how to utilise digital media for marketing, payment and operational management (Tambunan, 2023). Without strong digital literacy, technology adoption will only be partial and suboptimal.

In terms of funding, the government can act as a facilitator that provides access to financing to MSMEs for technology investment. Grant programmes or low-interest loans can be a solution to reduce financial barriers. Other studies also emphasise that institutional assistance and consultation for MSMEs are needed to increase the effectiveness of digital transformation (Wilestari et al., 2023; Tambunan, 2023).

Digitalisation as a Strategy to Improve Competitiveness

Digitalisation is not only a tool to survive but also to improve the competitiveness of MSMEs. With digital technology, MSMEs can expand their market to a national and even international scale. Online transactions through e-commerce allow businesses to reach consumers in various regions without geographical boundaries. Digitalisation also drives efficiency in operational management, for example through automation of production processes and inventory management (Leksono Putri Handayani et al., 2022).

In addition, digital payment systems are also an important factor that increases transaction efficiency. The use of digital wallets and electronic payment platforms is increasingly becoming the top choice of consumers due to its convenience and security. Research reveals that this ease of transaction drives an increase in sales volume and shortens transaction time (Leksono Putri Handayani et al., 2022; Octiva et al., 2024).

Alignment with Previous Research

The findings in this study are in line with previous research that suggests that

digitalisation can be a key driver in the development of MSMEs. For example, Ritter & Pedersen (2020) highlight that digitalisation not only improves efficiency but also enables businesses to create innovative business models. This gives MSMEs the opportunity to create a sustainable competitive advantage.

However, there is a gap in the application of digitalisation between MSMEs located in urban and rural areas. Studies show that MSMEs in remote areas often have limited access to infrastructure and training, thus facing difficulties in adopting technology (Aisyah et al., 2023; Wilestari et al., 2023). Therefore, special attention is needed to reduce this gap, one of which is through regionally-based development programmes.

Implications for the Future

Digitalisation of MSMEs not only provides solutions to today's challenges but also paves the way for long-term transformation. In the digital economy, the ability of MSMEs to adapt to technology will be a determining factor in their success. This research emphasises the importance of a holistic approach in supporting MSME digitisation, including collaboration between the government, private sector and academia.

In conclusion, digitalisation has great potential to improve the competitiveness of MSMEs in Indonesia. However, the success of this process depends on the synergy between various parties and the commitment to overcome the challenges. Thus, digitalisation is not only an adaptation tool but also a foundation to drive inclusive and sustainable economic growth.

CONCLUSION

Digitalization has proven to be an important element in driving the development of Micro, Small and Medium Enterprises (MSMEs) in Indonesia, especially after the COVID-19 pandemic. Digital transformation makes a significant contribution in expanding market reach, improving operational efficiency, and maximizing the profitability of business actors. Through digitalization, MSMEs are able to answer the challenges of the modern era, including changes in consumer behavior that now prefer online transactions and digital technology as an integral part of business processes.

However, behind the great potential and benefits, the implementation of digitalization in the MSME sector faces a number of obstacles that cannot be ignored. Lack of digital literacy among MSME players, limited access to technology, and lack of financial resources for initial investment are major obstacles in this transformation process. On the other hand, resistance to change, especially in the adaptation of new technologies, is also a significant challenge. This reflects the urgent need for training and mentoring programs to improve the human resource capacity of MSMEs.

The role of the government is a strategic component in accelerating the digitalization process of MSMEs. The necessary support includes the development of adequate technological infrastructure, provision of inclusive financial access, and strengthening digital literacy through education and socialization programs. In addition, efforts to create regulations that support technological innovation and encourage collaboration between the government, the private sector, and the MSME community are essential steps to ensure the sustainability of digitalization in this sector.

Overall, while digitization offers great opportunities to improve MSME competitiveness, its success depends largely on the ability of businesses to adapt to change, as well as effective collaboration between various stakeholders. The government, as the main facilitator, should continue to promote inclusive and needs-oriented policies, ensuring that every micro, small, and medium enterprise in Indonesia can take part in the growing digital ecosystem. With the right strategy, digitalization is not only a transformation tool, but also a catalyst for sustainable national economic growth.

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