Digitalization of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia

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Abstract.
Micro, Small, and Medium Enterprises (MSMEs) are essential in increasing national economic growth. The emergence of the digital economy has become a benchmark in implementing digitalization for MSMEs in Indonesia. Thus, this research aims to analyze the application of digitalization to MSMEs in Indonesia. The data used in the analysis of related topics is taken from various literature, both from journal articles and books. Data from various sources were then analyzed using a systematic literature review approach. The results of this analysis found that the current application of digital marketing is a new opportunity for the development of MSMEs in Indonesia. Therefore, the government's role in supporting the digitalization of MSMEs in Indonesia is important. Results show that the application of digitalization has a positive influence on MSMEs in Indonesia and based on the analysis it has been found that many MSME are utilizing digital technology to develop their businesses. The implementation of digitalization provides business sustainability, innovation, and the opportunity to compete with large businesses in the city. Therefore, the analysis found that the implementation of digitalization of MSMEs in Indonesia is very necessary in the era of society 4.0.

Keywords: digitalization, MSMEs, digital marketing, economic growth

1. Introduction

In the era of society 4.0, it is no longer strange if everything is based on digital technology, especially in economic development. The digital economy has begun to be intensively implemented in various parts of the world. The digital economy is an internet-based economic activity. The digital economic era itself emerged when there was a collaboration between the productivity of internet technology and human resources. The economy has a very important role in a country, especially Indonesia. Micro, Small, and Medium Enterprises (MSMEs) are an important pillar in supporting economic growth in Indonesia with a composition of 64.13 million (99.92%) of the total business sector of 64.19 million businesses (Armiani et al., 2022).
MSMEs are the driving force of the Indonesian economy today. MSMEs play an important role in the development and growth of the national economy. Every year, MSMEs experience a high increase. In 2018, the number of MSMEs was 64.2 million, or 99.9% of the number of business performers in Indonesia, and increased by 1.98% in 2019. Apart from that, MSMEs also absorb a lot of labor, namely 117 million workers or 97% of labor absorption capacity. The Ministry of Finance's DJKN news (Directorate General of State Assets, Ministry of Finance) stated that the contribution of MSMEs to the national economy of Gross Domestic Product (GDP) was 61.1% and the remaining 38.9% was contributed by large business performers, the number of which was 5,550 or 0.01 of the number of business performers (Suhargo et al., 2022)

Digitalization is the use of digital technology to transform a business model and provide new revenue and value-generating opportunities. This is a process of moving to digital business. Furthermore, the digitization process cannot occur without digitization. Digitalization is the use of digital technology and digitized data, to influence work completion, change company-customer interactions, and create new revenue streams (digitally) (Vhikry & Mulyani, 2023).

Attempting efforts to digitize MSMEs is not an easy step. Many obstacles and challenges must be faced. One of which is changing sales techniques from offline to online. This reality can be used as a reference that society is experiencing changes in the way it consumes. Considering these facts, various problems will arise. One of the problems is that many MSME performers still experience difficulties in using online applications. Furthermore, it may be confirmed that MSME performers also face difficulties in achieving targets. These changes in consumption patterns will be followed by changes in micro, small and medium enterprises (MSMEs) which will be able to rise and be motivated to face the era of digitalization of MSMEs. (Wijoyo & Widiyanti, 2020)

In a literature review (Fauzi et al., 2023), the benefits of digitizing accounting for MSMEs have a significant impact on the MSMEs performers’ profitability and productivity. Apart from that, the benefits of using digitized accounting for MSMEs in Indonesia are also discussed.

1.1. Better decision making

The accounting digitization system provides various features such as real-time financial data and automatic financial reports and estimates. These features enable MSMEs to make the right decisions and provide accurate and current information about their financial performance and future prospects.
1.2. Cost savings

Using a digitized accounting system can minimize the need for paper-based recording and manual data entry. In this way, the use of a digitized accounting system can reduce the administrative burden incurred by MSMEs. Moreover, digitized accounting can reduce the risk of late fines and improve cash flow management and working capital availability.

1.3. Improved customer service

Accounting digitization makes it easier for MSMEs to provide services to customers because of the availability of features such as invoicing and real-time payment processing, which can minimize transaction processing time. The use of a digital accounting system also provides transaction services that are transparent and accountable.

1.4. Increased efficiency and accuracy

Utilizing digitalization of MSME accounting in Indonesia can significantly increase the efficiency and accuracy of data. This accounting system can provide automated tasks such as data entry and reconciliation. The accounting system can also minimize errors that affect accuracy in financial reports.

In addition to the benefits of digitizing MSMEs in the accounting sector, there are also challenges that MSMEs must face in this digitalization. According to research studies (Fauzi et al., 2023), the main challenge that needs to be faced is human resource competency. Another challenge is the limited awareness and ability of MSME performers to utilize digitalization. Many MSME performers also find it expensive to implement the digitalization considering the long-term maintenance costs. The use of digitalization also relies on the internet to support the system. Meanwhile, there are still many MSME performers who do not have adequate internet access in their regions. This is one reason why MSME performers are still reluctant to adopt and invest in new technology.

Based on a literature review (Arianto, 2020), the following factors influence a person's decision to shop for online shopping using digital media: convenience because it avoids crowds when shopping, completeness of information because digital technology provides faster access in searching for information on various digital platforms, availability of products and services as they are widely available on various websites, cost and time efficiency which can offer buyers the best prices and buying and selling transactions
which can be carried out anywhere and at any time. From these factors, it is clear that the use of digitalization can help the progress and convenience of MSMEs in Indonesia.

2. Method

The method used in this research is the literature review literature study approach. This literature review literature study aims to study definitions of keywords, deepen theories and research concepts. This method also identifies interrelated variables between the background and the research context (Fuadi et al., 2022). This literature review literature study relates to the analysis of digitalization of MSMEs in Indonesia through analysis of several journal articles and books. Search for data from journal articles and books via Google Scholar using the keywords “digitalization of MSMEs” with a time frame of 2019 - 2023 or research conducted during the last five years. The literature study method, a literature review is conducted by analyzing several studies that have been carried out on digitalization of MSMEs in Indonesia.

3. Result and Discussion

3.1. Presenting the Results

Micro, small and medium enterprises (MSMEs) are productive businesses owned by individuals and/or business entities that meet the criteria for micro businesses. Small businesses are productive economic businesses that are independent and carried out by individuals or entities and are not subsidiaries of companies that are included in the criteria for small businesses. Meanwhile, medium enterprises themselves are productive economic enterprises that also exist independently and meet the criteria for medium enterprises as regulated in Government Regulations.

Apart from being an important pillar in national economic growth, the existence of micro, small and medium enterprises (MSMEs) also helps the government in overcoming widespread unemployment. Micro, small and medium enterprises (MSMEs) have provided very high employment opportunities for the Indonesian people. The criteria for micro, small and medium enterprises (MSMEs) according to Republic of Indonesia Government Regulation Number 7 of 2021 Article 35 are as follows:

1. Micro Business
Micro businesses have business capital of up to one billion rupiah, but this capital does not include the land and buildings where the business is set up. Micro business sales reach a maximum of two billion rupiah a year.

2. Small Business

Small businesses have business capital of more than one billion rupiah to five billion rupiah, but this capital does not include the land and buildings where the business is set up. Small business sales reach fifteen billion rupiah a year.

3. Medium Business

Medium businesses have business capital of more than five billion rupiah to ten billion rupiah, but this capital does not include the land and buildings where the business is set up. Micro business sales reach fifteen billion rupiah to fifty billion rupiah a year.

Quoting a study (Syahputra et al., 2023), MSMEs are a sector that needs to be digitized. MSMEs are currently considered to be the largest contributor to the economy in Indonesia, MSMEs are able to contribute to GDP (Gross Domestic Product) reaching 60.5% and absorb 96.9% of the national workforce. However, the reality is that there are still many MSMEs in Indonesia that are not yet able to utilize digital technology in their business processes. This condition is not ideal considering the importance of using digitalization in the 4.0 era. Digitalization allows MSMEs to face world economic uncertainty so that efforts are needed to increase the knowledge and skills of MSME performers in implementing digital technology.

Digitalization of MSMEs is something that is inevitable and also one of the solutions for the very large number of MSMEs in Indonesia. Digitalization can make it easier for MSME performers to face the changes that are currently occurring, increase the ease of networking and exchange technology with MSME performers. Therefore, they can survive in business competition. This digital and internet expert capability is something that must be absolutely mastered by MSMEs in order to be able to survive in business competition not only in Indonesia but also sustainable global competition. (Wijoyo & Widiyanti, 2020)

Research (Vhikry & Mulyani, 2023) on “Examining the Impact of Digitalization for MSMEs Post the Covid-19 pandemic” explains that digitalization became a major problem for MSMEs starting when the Covid-19 pandemic occurred. MSMEs must adapt to very rapid changes and technological developments. There is digital transformation to support the development of MSMEs in Indonesia. The results of this research also
explain that MSME performers feel the impact of using technology in expanding marketing and brand awareness. The Indonesian government is focusing on implementing digitalization of MSMEs to increase income.

Digitalization of MSMEs has become something that is inevitable, as well as one of the solutions for the very large number of MSMEs in Indonesia. To drive digitalization and make it easier for MSME performers to face the current climate of change, increase the ease of networking and exchange technology with MSME performers so that they can survive in business competition. Research (Wijoyo & Widiyanti, 2020) states that MSMEs performers must have digital and internet expert skills if they want to survive in today's business competition. Not only that, digitalization in MSMEs also has an impact on consumers in decision making. Consumers tend to make decisions about purchasing goods online based on digital content and online transaction payments. These facts on the ground make a strong case for the importance of digitizing MSMEs in Indonesia. Digitalization can support the development of MSMEs. Thus, implementing digitization is a solution for MSME performers to introduce and market their business products.

Digitalization to support the development of MSMEs in Indonesia focuses on three types of digitalization, namely the application of digital marketing, digital payments and digital accounting. Digital marketing in this case focuses more on the use of e-commerce and social media. MSME performers can market their business products through digital media. This was very efficiently used during the Covid-19 pandemic due to the limited flexibility of MSMEs in Indonesia. The book on “Digitalization of MSMEs” explains that digital business development can start from realizing marketing ideas through social media platforms such as bloggers, Instagram, Facebook and other digital business platforms. In general, the number of sales of MSME products increases from a scale of 50% - 100% of the benefits of using social media with information that MSMEs are able to sell up to 100% using social media optimally. (Wijoyo et al., 2020)

In the digitalization of MSMEs, there has been a change in the payment method, which was previously still conventional, slowly turning into a digital payment method. This digital payment is a transaction process by replacing physical money payments with electronic money. This digital payment also really helps the marketing process of MSME businesses. The existence of digital payments has provided benefits to MSME performers, including the ease in (1) paying bill which is a daily need for the community in carrying out daily transactions, and (2) money transfers which makes it easier for people to transfer money from one individual to another. The existence of digital payments in digitizing MSMEs makes the transaction process easier, faster and more efficient. (Leksono et al., 2022)
Digital transformation can be used to improve accounting in MSMEs, especially in the bookkeeping process. Therefore, bookkeeping can be done through an accounting information system, no longer manually. Apart from that, the use of digital accounting for MSMEs can help MSMEs to calculate, report, send and interpret financial report data more efficiently, quickly and effectively. This digitalization of accounting can also measure the level of profitability and productivity of a business. However, the realization of implementing digital accounting in MSMEs requires additional training and human resources because there are still many MSME performers who have limited knowledge of manual-based accounting to digital. (Fauzi et al., 2023). In research (Indah et al., 2022) on “Factors that Influence the Digitalization of Accounting Information in MSMEs in Mataram City” it was found that MSMEs have a positive and insignificant influence on the digitalization of accounting information. The development of accounting information technology is very useful for MSMEs. Thus, the application of accounting digitalization to MSMEs needs to be carried out to improve the development of MSMEs in Indonesia.

Economic growth refers to an increase in a country’s production and economic activity during a certain period. High economic growth is demonstrated by the fact that the country’s economy is running well. The results of research using a literature study approach explain that the role of MSMEs in improving the economy can be implemented by strengthening the quality of Human Resources (HR) of MSME performers. Micro, small and medium enterprises are the main pillars in increasing national economic growth. (Sarif, 2023). The digitalization of MSMEs in Indonesia is able to support and increase national economic growth.
TABLE 1: Previous Research / Research Gap.

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<th>No</th>
<th>Writer</th>
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<tr>
<td>1</td>
<td>Arrizal, N. Z., &amp; Sofyantoro, S. (2020)</td>
<td>Empowering the Creative Economy and MSMEs during the pandemic through digitalization</td>
<td>Digitalization really helps MSMEs in empowering the creative economy during the pandemic by digitalizing the law and digitizing the economy, such as: 1. Brand registration via the website 2. patent registration via the website 3. copyright registration through the website 4. marketing products via social media online By digitizing, MSMEs are able to optimize the business promotion process which has an impact on the development of their business</td>
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<td>2</td>
<td>Fauzi, Leni Rahmayana, Ika Wulandari, &amp; Bagus Hari Sugiharto. (2023)</td>
<td>Why Digitalization of Accounting Must Be Done in MSME Companies</td>
<td>The application of digitalization for MSMEs, especially in the accounting sector can improve efficiency, accuracy, decision making, customer service and financial access. Benefits of digitizing accounting in MSMEs: 1. Increasing efficiency and accuracy of financial reporting 2. Improving decision making with real time data from the accounting system so that MSMEs can make the right decisions based on accurate information 3. Cost savings due to reducing the need for paper-based recording and manual data entry 4. Improving customer service, with real-time invoicing and payment processing, reducing the time to process transactions and increasing the speed and accuracy of billing customers. Challenges of Accounting Digitalization in MSMEs: 1. Cost, digital accounting systems can be expensive to implement and maintain 2. Lack of technological capacity, quite a few MSMEs do not have the technological infrastructure or skills to implement it. 3. Resistance to change, transformation from traditional methods towards the adoption of new technology 4. Security and privacy concerns, fear of cyber attacks and data breaches</td>
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<td>3</td>
<td>Indah, L., Dewi, W., Hilendi, B. A., Kartikasari, N., Mataram, U., &amp; Human, S. D. (2022)</td>
<td>Factors that Influence the Digitalization of Accounting Information in MSMEs in Mataram City.</td>
<td>1. Human resources have a positive and significant influence on the digitalization of accounting information. 2. Having financial reports in digital form provides many benefits from having financial reports for monitoring business and making decisions 3. MSME size has a positive but not significant influence on information digitalization 4. The availability of facilities and infrastructure has a simultaneous influence on the digitalization of accounting information. 5. Digitalization makes it easier for MSME players to develop their businesses</td>
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<td>4</td>
<td>Leksono, N., Handayani, P., Soeparan, P. F., Raya, J., Timur, U., Weleri, N., &amp; Kendal, K. (2022)</td>
<td>The Role of Digital Payment Systems in Revitalizing MSMEs</td>
<td>Digitalization is an effort to encourage economic recovery. Utilization of digital technology for MSMEs to survive and be able to develop their business by turning digital or going online. The introduction of digital payments makes things easier for MSMEs and encourages the development of digital economic and financial transactions. The MSME community makes a positive contribution to national economic growth. Statistical data shows that MSMEs contribute greatly to GDP and are even able to survive crisis situations such as the Covid-19 pandemic. This condition makes MSME players switch to online sales. In situations like this, digitalization capabilities can help MSME businesses coupled with marketing digitalization.</td>
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<td>5</td>
<td>Novitasari, A. T. (2022)</td>
<td>Contribution of MSMEs to Economic Growth in the Digitalization Era Through the Role of Government</td>
<td>1. Contribution of MSMEs to the economy through the digitalization era 2. MSMEs have a significant role in the economy through digitalization 3. MSMEs are able to contribute to the economy through digitalization 4. MSMEs are able to contribute to the economy through digitalization</td>
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<td>6</td>
<td>Sarif, R. (2023)</td>
<td>The role of MSMEs in increasing Economic Growth in Indonesia</td>
<td>The role of MSMEs in increasing economic growth is carried out by improving the quality of human resources of MSME performers such as skills, knowledge and management abilities. Improving the quality of human resources in MSMEs can have an impact, namely: 1. Can increase business competitiveness and productivity 2. improve supply chains and collaboration between MSMEs and large companies or other institutions Improving the quality of human resources has a good influence on economic growth. So, if the quality of education of MSME performers is improved, the good performance of MSMEs will encourage economic growth in Indonesia.</td>
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<td>7</td>
<td>Vhikry, M., &amp; Mulyani, A. susi. (2023)</td>
<td>Examining the Impact of Digitalization for MSMEs Post the Covid 19 Pandemic</td>
<td>Digitalization has a significant impact on MSME entrepreneurs, namely: 1. expand market share 2. raise brand awareness 3. labor absorption in Indonesia 4. increase in turnover for MSME entrepreneurs</td>
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<td>8</td>
<td>Wijoyo, H., &amp; Widiyanti. (2020)</td>
<td>Digitalization of Micro, Small and Medium Enterprises (UMKM) in the Covid-19 Pandemic Era</td>
<td>Digitalization of MSMEs is something that cannot be avoided. Digitalization of MSMEs carried out online through marketplace sales is a solution for MSMEs to survive and support the Indonesian economy. The strategy that can be used to face the digitalization of MSMEs is by carrying out a SWOT analysis strategy, namely strengths, weaknesses, opportunities and threats.</td>
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<td>9</td>
<td>Arianto, B. (2020)</td>
<td>Development of Digital MSMEs during the Covid-19 Pandemic</td>
<td>Digital Economic Ecosystem The digital transformation strategy is carried out to maintain the existence of MSMEs in Indonesia. The Ministry of Cooperatives and Small and Medium Enterprises implemented a strategy namely: 1. preparing human resources for MSME actors 2. improving the business processes of MSME players 3. expanding market access The Urgency of Creative Content The development of digital-based MSMEs in Indonesia must pay attention to creative content to prepare for business competition in the digital era. Digital transformation helps MSMEs develop their businesses again, with the important role of the government and the Ministry of SME Cooperatives in supporting and guiding MSME players.</td>
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<td>10</td>
<td>Pardede, J. F., Nugroho, L., &amp; Hidayah, N. (2022)</td>
<td>Analysis of the Urgency of Digitalization and Financial Reports for MSMEs</td>
<td>1. Digitalization of MSMEs is a necessity and is supported by all stakeholders in maintaining economic stability because MSMEs are an important pillar in Indonesia's economic growth. 2. MSME performers are required to have a bank account in the digitization process because financial reports are important in interacting with banks and supporting effective decision making in developing MSME businesses in Indonesia.</td>
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Sources: various research journals
3.2. Create a Discussion

Research (Arrizal & Sofyantoro, 2020) on “Empowering the Creative Economy and MSMEs during the Pandemic” shows that it is important to carry out special training in implementing digitization by MSME performers, especially in marketing digitalization. At this stage, MSME performers are not only required to have soft skills, but hard skills also need to be considered. MSME readiness in the industrial era 4.0 requires modern technology training to produce optimal MSME products. This research also states that digitalizing MSMEs with the application of technology is one way to maintain MSMEs as an important pillar in national economic growth.

The revitalization aims at making MSMEs able to compete globally and sustainably. Digitalization is one of the revitalization strategies for developing MSMEs. The book entitled “Digitalization of MSMEs”, explains that there are six strategies that can be implemented, namely observation, improving business quality, building relationships, and utilizing e-commerce and social media as a form of implementing digitization. MSME performers need innovation in carrying out their marketing, namely digital marketing. By implementing digital marketing, it is possible to change the wheels of the economy of small and medium-sized communities. In the future, MSMEs will likely become large capacity businesses if the revitalization of MSME development is developed globally and sustainably. (Wijoyo et al., 2020)

The government is the regulator, policy maker and stabilizer of economic conditions for MSMEs. The government’s role in this case is to support the implementation of digitalization for MSMEs, such as providing facilities, stimulus, review and guidance for the process of sustaining MSMEs in applying digital technology. Considering that MSMEs are an important pillar in national economic growth, the government is planning strategic steps by providing assistance to the MSME program in the form of national economic recovery with a budget of 123.47 trillion. (Novitasari, 2022)

The government’s role here is very important. The MSME community, especially those in remote areas, need to continue to be provided with training, mentoring and mentoring regarding the socialization of the use of digital marketing platforms to make them familiar by using digital marketing. Therefore, their products are better known to the wider community outside the region or even throughout the archipelago as well as government support in terms of providing capital funds through a soft loan system. In addition, it is sufficient to provide a way for micro business performers to be able to continue to develop so that they can contribute greatly to national income. (Novitasari, 2022)
The use of digital marketing strategies by MSME performers has proven to be more efficient and effective and can prevent MSMEs from decreasing sales turnover, difficulty paying loan installments, and reducing employees. Therefore, digitalization must be implemented for MSMEs to maintain their businesses and increase competitiveness. The government must also support the digitization process through infrastructure preparation such as the availability of internet networks to remote villages and remote areas. Not only the government, stakeholders such as educational institutions can also help in increasing knowledge for MSME performers. (Pardede et al., 2022)

4. Conclusion

It is undeniable that micro, small and medium enterprises (MSMEs) are an important pillar in national economic growth. In this way, the sustainability of MSMEs also needs to be considered to maintain economic stability. Digitalization is a way to maintain the sustainability of MSMEs. The implication of the digitalization of MSMEs is that it can bring MSMEs not only to develop in the archipelago but also to be able to develop and compete globally and sustainably. The digitalization of MSMEs, which have shifted to online sales patterns through digital media platforms, is the result of digital transformation in MSMEs. Digitalization of MSMEs in Indonesia focuses on three types of digital, namely digital marketing, digital payments and digital accounting.

There is a need for government participation in assisting in the digitization process of MSMEs in Indonesia. It is hoped that the government as a regulator and policy maker will be able to provide supporting facilities for MSMEs in Indonesia. Digitalization of MSMEs needs to be applied to all MSME companies because it is possible that digitalization will really help the running of micro, small and medium enterprises (MSMEs) and with digitalization the market share of MSMEs will expand and widen. Thus, MSMEs can continue to be the pillar for increasing national economic growth.

The results of this literature review show the importance of digitalization for MSMEs in Indonesia. The benefit of implementing digitization is that MSMEs are able to survive in developing their businesses, MSMEs are able to absorb the national workforce, so that MSMEs are able to survive in increasing national economic growth. Apart from that, the benefits obtained for MSME players include ease in making accurate and up-to-date decisions, making transaction processes easier due to digital payments, acceptance of technological changes from manual processes to modern ones based on digital technology. The use of digitalization in MSMEs also saves costs for MSME players. This
study proves that digitalization has a positive influence on the development of MSMEs in Indonesia.

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References


