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Research Article

Digital Literacy Skills in Improving the Performance of MSMEs in Indonesia: A Systematic Literature Review

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Abstract: Digital literacy at the Micro, Small and Medium Enterprises (MSME) scale is part of the digital transformation that can drive economic growth in Indonesia. Business actors are required to have digital skills, one of the important aspects to build a sustainable strategy as a form of solution for business people in an effort to develop their business. This research aims to explore the understanding of digital literacy among Indonesian MSMEs, focusing on the development of digital transformation, digital adoption, challenges and obstacles, and strategies used for business sustainability. The method used in this research is Systematic Literature Review (SLR) with stages: planning, implementation, and reporting. SLR in this study was conducted using a collection of literature studies published from January 2020 to October 2024. The results of this study indicate that digital literacy is an important factor affecting performance among MSMEs, through skills in utilizing digital platform opportunities in the context of business development such as e-commerce platforms. Challenges faced such as limited resources in managing technological devices and lack of digital literacy can be overcome by implementing strategies to improve skills and understanding related to digitalization, fostering a supportive ecosystem, and socializing the importance of entrepreneurial leadership optimally to achieve sustainable growth and higher competitiveness.

Keywords: Digital Literacy, MSME Performance, SLR.

1. Introduction

Micro, Small, and Medium-sized Enterprises (MSMEs) are widely recognized as making an important contribution to economic development, especially in developing countries such as Indonesia. MSMEs are considered capable of driving innovation, and are significantly able to create jobs and economic growth (Fan, et. al., 2021; Luthfi, et. al., 2022). In a rapidly evolving business landscape, as well as technological developments, digital transformation is one of the main things among MSMEs to meet the expectations of today's fast-paced market. However, many MSME players face complex challenges in their efforts to improve performance due to factors such as in-depth managerial and technical skills in entrepreneurship, internal and external business environment, and digital skills.

Training and coaching conducted for MSME actors can encourage effectiveness and improve MSME performance so that businesses can withstand rapidly changing market needs (Srigouri & Muduli, 2024). The existence of training and coaching for MSMEs can improve the management of production results and improve the performance of these MSMEs (Anggraeni et. al., 2023). Entrepreneurship training can provide practical skills and broad insights for business actors so that it can help them to survive in a dynamic business environment such as increasing the ability to effectively identify consumer needs, the ability to see market opportunities, build relevant networks, improve the ability to manage operations, and respond to emerging changes.

Digital literacy relates to skills in using digital technology productively. Digital literacy has the most significant influence on the performance of MSMEs, so priorities are needed regarding the use of online facilities, utilizing digital networks for optimal results, and

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fostering digital business relationships to design strategies to develop pre-existing performance (Sariwulan, et. al., 2020).

This systematic literature review aims to provide a comprehensive understanding of current digital literacy skills among MSMEs in Indonesia by focusing on three key areas: digital transformation development, digital adoption, challenges and barriers, and implementation. Digital literacy at the MSME scale in terms of training and coaching conducted for MSME players can encourage effectiveness and improve MSME performance so that businesses can withstand the needs of a rapidly changing market (Srigouri & Muduli, 2024). Entrepreneurship training can provide practical skills and broad insights for business actors so that it can help them to survive in a dynamic business environment such as increased ability to effectively identify consumer needs, ability to see market opportunities, build relevant networks, improve the ability to manage operations, and respond to emerging changes.

2. Research Methods

This research focuses on three fundamental components of conducting a Systematic Literature Review (SLR): (1) Planning: At this stage the researcher focuses on determining the research-related needs and outlining the review procedure. (2) Implementation: This stage refers to carrying out the planning with attention to the established protocol to be strictly adhered to, including inclusion and exclusion criteria. (3) Reporting: This stage refers to conducting statistical analysis of the selected papers and presenting the findings, as illustrated in Figure 2.

2.1. Planning

When collecting data related to digital literacy on improving the performance of MSMEs in Indonesia, researchers maintain the focus of the study with three research questions (RQ) designed as shown in Figure 1.



Figure 1. Reseach Question of Literatur Review

The search method consists of several stages: selection of papers in digital libraries, formulating search queries, conducting initial searches, refining search queries, and obtaining an initial set of primary studies that meet the search requirements from digital libraries. The search was conducted using various databases, such as Springer, Taylor and Francis, MDPI, Emerald, and Google Scholar, to find articles from journals and conferences included in the SCImago Journal Country Rank (SJR) with impact factors.

The search queries used were: 'Digital Literacy AND 'MSME' OR 'Micro, Small and Medium Enterprises' OR 'MSME' AND 'Indonesia' The search included documents published between January 2020 and October 2024 through open access Journals. Document selection criteria included: (1) Research papers that answer the research questions; (2) Studies that explore how digital literacy has an impact on the performance of MSMEs in Indonesia; (3) Studies that explore the factors that influence the adoption of digital technologies by MSMEs in Indonesia; (4) The main challenges faced by MSMEs in Indonesia regarding the ability to understand digital literacy; (5) How does digital literacy impact the performance of MSMEs in Indonesia?

2.2. Implementation Stage

The researcher conducted the search using the approach defined in Section 2. After making the relevant selections, the content of each document was scrutinized to verify

compliance with the defined selection criteria. Figure 2 illustrates the procedure for conducting a methodical examination of the existing literature, known as a systematic review. Figure 2: Systematic Literature Review (SLR) Steps Reporting Stage. In the Reporting Stage of the systematic literature review process, the main step is to disseminate the results of the review. This involves compiling a comprehensive and detailed report that covers the methods used, the results obtained, and conducting data analysis and interpretation. Results and Discussion related to Results and Reporting Selection of articles on Digital Transformation of MSMEs in Indonesia based on Springer, Taylor and Francis, MDPI, and Google Scholar databases. There were 5 articles analyzed further, with the percentage of database sources shown in Figure 2.

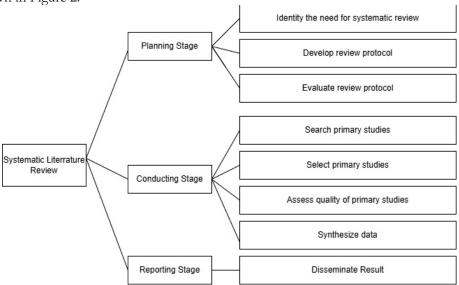


Figure 2. Stages of Systematic Literature Review

2.3. Reporting Stage

In this reporting stage, starting from this systematic literature review process, the main step is to disseminate the results of the review. This involves preparing a comprehensive and detailed report that includes the methods used, the results obtained, and the analysis and interpretation of the data

3. Result and Discussion

The results of the selection of studies on Digital literacy on the performance of MSMEs in Indonesia based on Springer, Taylor and Francis, MDPI, and Google Scholar databases. There are 10 articles that were further analyzed, with the percentage of database sources in detail shown in Figure 3.

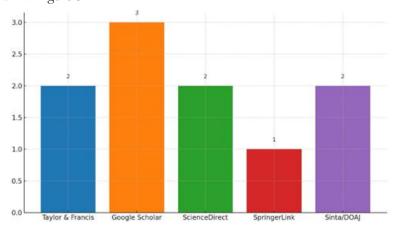


Figure 3. Distribution of Reference Source Articles

3.1. How digital literacy impacts the performance of MSMEs in Indonesia?

Digital literacy has a significant role in improving the performance of MSMEs when business actors have full awareness of digital transformation as the main need to develop their business. Since the COVID-19 pandemic, the needs related to digital technology and changes in consumer behavior have grown so rapidly that MSME players are required to be able to adapt. (Raharjo, Afrianty & Prakasa, 2024). Digital literacy has been identified as an antecedent factor that affects the speed of digital transformation. Research shows that digital literacy has a significant and positive impact on digital business transformation.

3.2. Factors influencing the adoption of digital technology by MSMEs in Indonesia

a. External Factors

External factors such as the business environment and the COVID-19 pandemic affect the resilience and recovery of MSMEs. e-commerce is a digital technology that offers opportunities for MSME players related to maintaining and restoring business after the COVID-19 pandemic (Suryani et al., 2022). Moreover, the various conveniences offered on e-commerce platforms can also improve supply chain performance as a form of open innovation for the digitalization of MSMEs (Kilay, Simamora & Putra, 2022).

b. Internal Factors

Digital literacy provides opportunities for MSME players to innovate in complex but efficient business management. Social media networks are one of the digital technology tools that are a solution for MSMEs in carrying out various human resource management activities such as recruitment activities, to training and development flexibly (Lyna et. al., 2022; Maria & Pambayun, 2024).

Financial factors, including financial bootstrapping, financial literacy, and access to working capital, play an important role in MSME performance. Digital transformation creates new perspectives on improving financial performance, and financial bootstrapping strategies are used by MSMEs (Amalia & Melati, 2021).

3.3. The main challenges faced by MSMEs in Indonesia relate to their ability to understanding of digital literacy

Although digital transformation and e-commerce have a number of opportunities and benefits, MSME players still face various complex challenges in adopting digital technology, readiness to adapt to digital transformation that has not been evenly distributed among MSMEs, such as the use of gadgets that are no longer relevant to current business development needs, and digital literacy that is not optimal is still a significant limitation and can hinder the optimization of technology utilization. Other challenges regarding the limitations faced by MSMEs are limited access to capital, inadequate innovation business management, and unstable market conditions (Maria and Pambayun 2024; Rosyidiana and Narsa 2024).

3.4. Strategies to Improve Digital Literacy and MSME performance in Indonesia

Efforts that can be made by MSME actors as a solution to overcome challenges and improve MSME performance in the digital economy can be realized through the implementation of the following strategies:

- a) Providing digital literacy training is very important for MSME players.
- b) Government support, including business incubation and facilitating access to technology and the internet, can increase social capital and drive digital transformation.
- c) Encouraging MSMEs to join sectoral organizations or associations can help build relationships and engage in capacity building initiatives.
- d) Promoting entrepreneurial leadership, which emphasizes innovation and risk-taking, can help MSMEs navigate an uncertain environment.

Based on the description of the strategy above, efforts to improve the performance of MSMEs in facing various complex challenges that hinder the achievement of the process require an integrated approach. This includes improving digital literacy through various training as needed, active support from the government in the form of business incubation and easy access to technology, and strengthening social media networks through the involvement of MSME players in sectoral associations.

Another important thing is to start developing entrepreneurial leadership skills that are adaptive to changes in market orientation and have openness to innovation, especially

technology-based and digitalization so that MSMEs in Indonesia have high competitiveness and are sustainable in the digital era

4. Conclusion

This research provides a comprehensive understanding of the importance of digital literacy related skills to performance improvement for MSME players in Indonesia, highlighting 5 key areas: understanding, digital adoption, challenges, and strategies that need to be used. The existence of digital literacy provides significant benefits, such as increased understanding in adapting to digital transformation, helping MSME players in conducting targeted business management, market reach, operational efficiency, and profitability. However, this process also faces resource limitations, inadequate technical skills and other issues.

The results of this study are in line with previous findings, which emphasize the importance for MSME actors to implement digital-based strategies to maintain and improve the sustainability of their businesses. By implementing strategies on digital literacy through training and coaching on a supportive ecosystem, starting to promote entrepreneurial leadership to improve resilience and performance, MSMEs in Indonesia can achieve sustainable growth and be highly competitive in a rapidly evolving digital economy.

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