

From Warung to Online Store: Digital Business Strategies in Indonesia

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Abstract

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Digital transformation has become a key driver of the development of micro, small, and medium enterprises (MSMEs) in Indonesia, especially in the shift from traditional models such as warungs to online business platforms. This shift not only increases the competitiveness of MSMEs, but also opens up wider access to markets, technology, and financial services. This article aims to analyze the digital business strategy of MSMEs in Indonesia and map the factors that affect their success. To achieve this goal, this study uses the Systematic Literature Review (SLR) method by examining various relevant academic and policy studies regarding the digitalization of MSMEs in Indonesia. The results of the study show that there is a strong trend in the implementation of digital strategies, such as the use of digital marketing, the use of e-payments, and the integration of MSMEs into the marketplace as a form of business adaptation. Government support through programs such as Go Digital MSMEs and the National Movement of 1 Million MSMEs Go Online has also accelerated the digitalization process. However, challenges still arise in the form of low digital literacy, limited infrastructure, and consumer trust issues. This study concludes that the success of MSME digitalization is largely determined by community support, innovative ecosystems, and collaboration with large platforms. These findings provide academic contributions and practical recommendations for MSME actors and policymakers in strengthening digital transformation in Indonesia.

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1. Introduction

Although the opportunity for digitalization is huge, the transition of traditional warungs to online stores cannot be separated from various problems. First, the digital literacy of MSME actors is still relatively low. Many stall owners are not used to using digital technology effectively for business activities, so adaptation is slow (Li et al., 2022). Second, the limitation of technological infrastructure, especially in remote areas, is also an obstacle, considering that not all regions have stable internet access (Ainun, 2022). In addition, the high cost of technology adoption for some MSME actors is a challenge in itself, especially for small stalls with thin profit margins (Nisa & Adinugraha, 2024). Another problem is the gap in technology access between business actors in urban and rural areas, which further widens the competitiveness gap. The lack of optimal regulations in supporting the digitalization of MSMEs also makes the transition process less effective (ER et al., 2024).

On the other hand, warungs also face stiff competition, both from modern convenience stores that offer convenience and competitive prices, and from large digital platforms that dominate the online market (Hana & Afgani, 2024). If they are unable to adapt, stalls risk losing their economic role, even though socio-culturally stalls still have an important function in the lives of Indonesian people. Although there have been quite a lot of studies on the digitalization of Indonesian MSMEs, most of the research is partial. Some only highlight certain aspects such as digital marketing, the use of e-wallets, or the role of government policies, but there has been no comprehensive study that presents the results of the literature in a

systematic and integrated manner, especially in the context of the transformation of traditional warungs to online stores (Diah & Tri, 2018; Chaniago, 2020; Ainun, 2022).

For example, Diah and Tri's (2018) research emphasizes more on the development factors of tegal stalls, while Nisa and Adinugraha (2024) focus on the impact of modern retail on traditional stores. On the other hand, ER et al. (2024) highlight the social and technical dimensions of the digitalization of stalls, but have not yet linked them to the broader digital business strategy. Meanwhile, Li et al. (2022) discuss the role of knowledge transfer in corporate digital transformation, but the context of MSMEs in Indonesia is still not paid attention. Therefore, a systematic study is needed that is able to map the literature thoroughly and present an integrative analysis of the digital strategy of MSMEs in Indonesia. Approaches such as Systematic Literature Review (SLR) can answer this gap by providing a mapping of strategy trends, driving factors, and the main challenges in the digitalization of stalls and MSMEs.

This study aims to analyze the digital business strategy of MSMEs in Indonesia through the SLR method, focusing on the transformation from traditional warungs to online stores. Through this approach, the research is expected to provide a holistic picture of the digital strategies implemented, identify key success factors, and uncover the challenges faced by MSME actors. In addition, this research is also expected to make a theoretical contribution to the development of academic literature as well as practical recommendations for MSME actors, policy makers, and

Indonesia's digital ecosystem so that the transformation of MSMEs can run more inclusive and sustainable.

2. Methods

To understand how digital business strategies develop in Indonesia, especially in the context of warungs and MSMEs, this study uses the Systematic Literature Review (SLR) method. This method is actually a very structured and systematic way of collecting and analyzing a variety of existing research. The goal is not just to read randomly, but to really sort and study the literature thoroughly so that the picture we get is clear, reliable, and can be a strong basis for understanding. The reason for choosing SLR is because in Indonesia there has been a lot of research on the digitalization of MSMEs, but usually they only discuss certain aspects, for example only about digital marketing, the use of electronic payments, or government programs. Unfortunately, no one has fully summarized everything from these various points of view. With this approach, we can know the common patterns that emerge, what challenges are often encountered, and what factors really help the success of digitalization in the real world.

In its implementation, the research searches literature from various reliable sources containing scientific articles that have been tested for quality through a peer-review process. This research focuses on studies that discuss the Indonesian context, especially those that raise the topic of how stalls and MSMEs adopt digital technology in running their businesses. So, articles that discuss MSMEs in general without mentioning the digitalization aspect or that focus on other countries, are

deliberately not included in the analysis. The selection process begins with collecting a number of articles related to the topic, then we conduct a gradual screening. First, articles that are considered less relevant from the title and abstract are immediately removed. After that, articles that meet the criteria are downloaded and read thoroughly to ensure that the content is indeed in accordance with the research objectives. From this process, we finally gathered dozens of articles that were really suitable for further analysis.

To analyze the content of these articles, we used coding and theme grouping techniques. So, each important finding or information in the article is identified, then grouped into major themes such as digital business trends and strategies, the role of the government, obstacles faced by business actors, to factors that determine the success of digitalization. In this way, the results of the research are not only in the form of a long list of references, but also a comprehensive picture that can be used as a foothold and input for various parties. This approach also helps reduce the bias that may arise if you rely on only one or two studies. By looking at many studies at once, we can capture patterns, differences, and research gaps that have been underappreciated. On the other hand, the SLR method provides a strong foundation so that the recommendations produced are not only based on conjecture, but are tested through facts and findings of various studies.

3. Results

3.1. Digital Business Trends and Strategies in Indonesia

The digital transformation of businesses in Indonesia marks a very meaningful change for MSME actors, especially traditional stalls that have been an icon of the people's economy. Warungs are basically small micro businesses that operate on a local scale with predominantly transactions carried out in cash and face-to-face with customers. However, changes in people's lifestyles, advances in digital technology, and current market dynamics force these stalls to adapt to an increasingly digital and competitive business environment (ER et al., 2024).

Changing consumer behavior, which is now increasingly comfortable and accustomed to transactions via smartphones and the internet, has triggered warungs and other MSMEs to implement various digital strategies to maintain their business relevance and growth. One of the most widely adopted strategies is digital marketing, which includes the use of social media such as Instagram, Facebook, and TikTok as a means of product promotion. In addition, search engine optimization (SEO) is also starting to be looked at so that MSME products can be more easily found on search engines, thereby increasing visibility and sales potential.

No less important, the use of e-payment or electronic payments is an integral part of the digital strategy. The use of e-wallets such as OVO, GoPay, and Dana makes it easier for consumers to make transactions quickly and efficiently without the need to carry cash. On the business side, this e-payment feature reduces the risk of losing cash and makes it easier to record daily transactions. This time efficiency

and convenience certainly provide its own attraction that encourages more and more stalls and MSMEs to adopt this technology.

In addition, the penetration of the marketplace as a digital sales platform has become a major trend in the digitization of MSMEs. Warungs and small business actors are now starting to market their products through large marketplaces such as Tokopedia, Shopee, and Bukalapak. Marketplaces provide a proven digital infrastructure including payment, logistics, and marketing systems that help MSMEs access a much broader market than relying solely on physical stores. This significantly changes the traditional business paradigm that was previously limited to local communities into businesses with national and even international reach (ER et al., 2024).

The Government of Indonesia also plays a key role in accelerating the digitalization of MSMEs through various empowerment programs. The Go Digital MSME program, for example, provides training, mentoring, and access to digital tools specifically designed for micro and small business actors to make the most of technology. Likewise, the National Movement of 1 Million MSMEs Go Online, which is a national-scale initiative to target millions of MSME actors so that they can digitalize their businesses massively and sustainably (Paradizsa & Rahayu, 2022). Supportive regulations, such as the ease of online registration of Business Identification Number and tax simplification for digital MSMEs, help strengthen Indonesia's digital ecosystem as a whole.

As a practical example, app-based digital kiosks are starting to emerge that combine online ordering systems, digital payments, and delivery services. In big cities

and buffer areas, this model of stalls has received a positive response from consumers who want easy access and speed of service. Innovation also emerged in the form of partnerships that brought together warungs with digital financial platforms, providing access to microfinance that was previously difficult to obtain. This helps MSMEs expand capital capacity and improve service quality (Nisa & Adinugraha, 2024).

The literature reviewed provides an overview that service innovation is not only limited to transaction digitization, but also the development of products and services based on data and analytics. The use of data analytics allows MSME actors to understand consumer behavior and preferences in more detail, with the aim of providing more targeted and personalized services. For example, the existence of product recommendations that match customer shopping patterns is a competitive added value in the digital realm (Leão & da Silva, 2021).

In short, the digital business trend in Indonesia shows a combination of the power of modern technology with the local characteristics of traditional stalls that are still very attached to the culture of the community. Digital adaptation and innovation are not only about technology, but also the transformation of the mindset of business actors and the synergy between the government, business actors, and major digital platforms that together create an inclusive and sustainable digital business ecosystem in Indonesia.

3.2. Challenges and Success Factors

Although the opportunities in the digital transformation of MSMEs in Indonesia are very promising, the journey to successful digitalization is not easy. There are many significant challenges that still hinder this process, both technical, social, and cultural. The main obstacle that is most often mentioned in the literature is the low digital literacy among MSME actors, especially for those who have been running businesses conventionally and are not used to using digital devices. This condition causes fear, confusion, and ignorance in operating new technologies, thereby hindering the speed of digital adaptation among micro and small business actors (Raihan, 2024). In addition, uneven technological infrastructure is also a serious problem, especially in rural and remote areas. The availability of a fast and stable internet network is still a luxury item in many regions in Indonesia. This certainly has an impact on the ability of MSMEs to access digital platforms optimally. Another major obstacle is the high cost of technology implementation, ranging from hardware purchases, application subscription fees, to fairly intensive training needs.

For most small business actors with limited capital, this cost burden is a significant barrier (Rosli et al., 2021). In addition to technical barriers, the consumer confidence factor is also very important to consider. The shopping culture in Indonesia, which still prioritizes direct social interaction, makes some consumers hesitant to switch completely to online platforms. The process of face-to-face transactions and personal trust is a value that is difficult to replace. Therefore, digitalization efforts must be accompanied by a system that provides a sense of

security and trust, for example with a clear track record, customer testimonials, and accountable service quality (Chaniago, 2020).

In facing these challenges, a number of success factors emerged as the main determinants of achieving effective digitalization. Community support and social networks have become vital. A solid community of MSME actors who actively share digital experiences, resources, and knowledge can accelerate the learning process and technology adaptation. Support networks from government, private, and academic institutions also help strengthen the ecosystem that supports digital MSMEs (Li et al., 2022). A complete digital ecosystem consisting of distribution platforms, easy funding systems, and continuous digital training is the main foundation for MSMEs to survive and develop digitally. Appropriately designed training is not only about technical skills, but also digital marketing strategies and online business management.

Product and service innovation that is oriented to the needs of the digital market is also a key factor in the competitiveness of online shops and stores. Products that are tailored to the market demand based on digital data have a greater chance of being accepted and increasing customer loyalty. Strategic collaborations with major platforms such as marketplaces and fintech companies also play an important role. Through this partnership, MSMEs get direct access to a wider market as well as various additional services such as microfinance, logistics management, and integrated digital marketing (Proksch et al., 2024).

In addition, in the context of Indonesian culture, shopping at stalls is not only a matter of buying and selling, but also a moment of social interaction. Therefore, digital strategies must be able to integrate these socio-cultural values, for example by

providing direct communication features on digital platforms, special loyalty programs, or online communities that repeat the family nuances of traditional stalls (Ainun, 2022). Comparison of findings between studies shows consistency that the success of business digitalization in Indonesia requires an integration of technological innovation with local cultural and social approaches. Thus, digitalization is not just the adoption of technology, but a transformation process that involves changing mindset, work culture, and sustainable patterns of social business relations.

4. Conclusion

This study examines the digital business strategies implemented by MSMEs in Indonesia, particularly in the transition from traditional stalls to online stores, using a systematic literature review. Key findings indicate that widely used adaptation strategies include utilizing digital marketing, using electronic payment systems, and integrating businesses into major marketplaces. These efforts are largely supported by government programs, which are key drivers of MSME digitalization. However, MSMEs still face various structural obstacles, such as low digital literacy, inadequate infrastructure, high technology costs, and a lack of consumer trust in digital transactions.

The determining factors for MSME success are largely related to community support, a strong digital ecosystem, product or service innovation, and collaboration with major digital platforms. Interestingly, these strategies are able to harmoniously integrate traditional Indonesian cultural values with modern technological practices.

From a theoretical perspective, these results enrich the understanding of digital transformation in developing countries by demonstrating how cultural, social, and technological aspects interact to shape MSME strategies. Practically, this study provides recommendations for MSME owners, policymakers, and ecosystem actors to improve business resilience through targeted training, affordable technology availability, and inclusive marketplace policies. However, this research also has limitations because it relies solely on the SLR method and literature in English and Indonesian, thus not fully reflecting the conditions on the ground. Therefore, further studies are recommended to conduct field research, sector-specific analyses, and long-term studies to uncover the dynamics of MSME digitalization in greater depth and relevance.

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