

An Integrated Digital Marketing and Support System Model for MSME Visibility and Sustainability

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Abstract

This study develops an integrated digital marketing development model supported by a digital support system to enhance the visibility and sustainability of micro, small, and medium enterprises (MSMEs) in Indonesia. MSMEs often face limited digital capabilities, low online visibility, and insufficient institutional support. This research uses a qualitative case study involving 12 MSMEs in Yogyakarta, with data collected through in-depth interviews, observations, and document analysis. The data were analyzed using the Miles and Huberman interactive model. The findings show that MSMEs receiving digital training, technological infrastructure support, analytics tools, and institutional facilitation achieve higher digital visibility, more consistent marketing performance, and stronger business sustainability. The study proposes a four-component model consisting of digital marketing execution, digital literacy development, technological infrastructure support, and institutional facilitation. This integrated model provides a practical framework for sustainable MSME digital transformation.

Keywords:

Digital marketing,
Digital support system,
MSME sustainability,
digital visibility

1. Introduction

Micro, small, and medium enterprises (MSMEs) play a crucial role in economic development and employment generation, particularly in developing countries. However, many MSMEs still face limitations in digital capability, online visibility, and strategic digital marketing adoption, which hinder their competitiveness in digital markets (Wu et al., 2024; Rahman, 2025). Although digital platforms provide opportunities for market expansion, most MSMEs fail to utilize them effectively due to limited skills, inadequate technological infrastructure, and insufficient institutional support (Arnaud et al., 2024; Datta, 2024).

Previous studies indicate that digital marketing can enhance brand awareness, customer engagement, and sales performance (Raj, 2024; Taherdoost, 2023). Nevertheless, most existing research focuses mainly on platform adoption without integrating structured digital support systems that foster long-term sustainability and capability development (Sahoo et al., 2025). As a result, many digital marketing initiatives among MSMEs produce short-term outcomes rather than sustainable business performance.

A significant research gap remains, as few studies propose an integrated model that systematically combines digital marketing strategies with digital support systems such as training, infrastructure, and institutional facilitation. Therefore, this study aims to develop a digital marketing development model based on a digital support system to enhance MSME visibility and sustainability. Recent literature shows that digital marketing strategies particularly social media use, e-commerce adoption, and digital content deployment can enhance SMEs' market visibility and performance outcomes through stronger customer interaction and capability-based advantages (Dwivedi et al., 2021; Marolt et al., 2022; Salah & Ayyash, 2024). However, despite the recognized potential, many SMEs still lag in digital adoption due to internal readiness constraints such as human resources, digital culture, and limited managerial/organizational support for technology uptake (Anatan & Nur, 2023; Faiz et al., 2024). In addition, there remains a theoretical gap regarding how a digital support system as an integrated, technology-based organizational resource can be systematically designed and implemented to enable SMEs to execute digital marketing strategies more effectively and sustainably (Xie et al., 2022).

Studies in digital platforms and information-systems-enabled capability reconfiguration suggest that technology resources can help SMEs reorganize capabilities and innovate, which in turn strengthens competitiveness and performance (Xie et al., 2022). Nevertheless, the literature is still limited in offering structured, integrated models that explicitly combine digital marketing practices with support-system components (e.g., readiness, capability building, and technology-enabled processes) to provide sustained support for SMEs.

Therefore, this research aims to develop a digital marketing development model based on a digital support system to enhance MSME visibility and sustainability. By examining MSMEs in Yogyakarta, Indonesia, this study provides practical and theoretical insights into how integrated digital support mechanisms can strengthen MSME competitiveness and long-term performance in emerging digital economies. These goals are designed to bridge the gap between digital marketing potential and practical implementation in the context of MSMEs, as well as meet the increasingly urgent needs of business sustainability, because research suggests that adoption of digital marketing and e-marketing strategies positively influences SMEs' performance and competitiveness but remains uneven due to organizational readiness and environmental constraints (Sharabati et al., 2024).

Based on the fact that most MSMEs have not been able to utilize digital marketing optimally and the real potential of digital strategies proven to be able to increase visibility and sales, the main argument in this study is that the adoption of digital marketing models based on digital support systems will significantly strengthen the visibility and sustainability of MSMEs. Driven by the urgent need for integrated solutions that not only increase awareness and engagement, but also provide a technical and strategic support structure, this research is important to explore the effectiveness of such models. Thus, it is hoped that this model can be the foundation for sustainable digital transformation for MSMEs answering the demands of long-term growth in an increasingly competitive digital market ecosystem.

Digital marketing is a strategic approach that promotes products and services through various digital platforms and technologies, including social media, e-commerce, digital content, and email marketing (Taherdoost, 2023). This concept not only includes message delivery and advertising, but also includes building brand awareness, customer engagement, and marketing performance analysis through digital tools (Raj, 2024). In the context of MSMEs, digital marketing is crucial because it provides access to a wider audience at a more cost-efficient time than traditional methods. Digital marketing strategies significantly influence SME performance by enhancing innovativeness, agility, and customer engagement (Wu et al., 2024). Thus, Digital Marketing can be interpreted as a comprehensive strategy that utilizes digital technology to strengthen the competitiveness and visibility of MSMEs in the digital economy era.

The manifestation of digital marketing for MSMEs includes the application of various tactics such as the use of social media, email marketing, creative content, and e-commerce as distribution and promotion channels. Social media, for example, is not only used as a means of promotion but also as a platform to build engagement and community engagement. Furthermore, content marketing allows MSMEs to produce materials that are relevant to the audience and encourage more effective digital interactions. E-commerce and online stores play a key role in expanding market reach, allowing

penetration into local and global markets. Thus, digital marketing is realized through a combination of digital-integrated platforms and tactics to achieve MSME marketing effectiveness.

Digital support systems refer to digital technology infrastructure, platforms, and services that support MSME business operations and strategies, including web-based applications, analytics systems, stock management, and digital promotion platforms. This concept includes functional support such as training, technology access, and system tools that facilitate data processing, digital marketing, and customer interaction (Russell, 2019). Digital support systems are an important element so that MSMEs can adopt and manage digital marketing effectively and sustainably, bridging the gap between technical potential and practical implementation.

The manifestation of digital support systems can be seen in the form of digital marketing training, assistance in the use of business applications, and web-based application development which includes product management, sales, inventory, and reporting. In addition, operational digitalization such as stock management systems and online applications needs to be supported by the development of digital infrastructure and technological literacy (Arnaud et al., 2024). The proposed "MSMEs Go Digital" program also reflects an integrative strategy in the form of structural and systemic support for digital adoption by MSMEs. Thus, the digital support system is formed from the synergy of technological devices, training, and comprehensive supporting infrastructure to strengthen the operational and marketing capabilities of MSMEs.

The sustainability of MSMEs refers to the ability of micro and small business actors to maintain operations, economic growth, and long-term adaptation in the face of market dynamics and technological changes. In the context of digital marketing, sustainability means business continuity that is not only driven by sales, but also by operational efficiency, adaptability, and digital capabilities that support business resilience in the future (Miller, 2011). This concept is important to ensure that digital transformation not only increases temporary visibility, but also strengthens the foundation of MSMEs to survive and grow consistently.

The sustainability of MSMEs is reflected in practices such as the use of adaptive and environmentally friendly digital marketing practices, as well as operational digitalization that increases business efficiency. Digital marketing mentoring programs have been proven to increase knowledge, consumer engagement, and content quality, which in turn supports business sustainability. In addition, the application of digital technology in business operations such as inventory management, customer data processing, and online integration increases the resilience of MSME businesses to market shocks (Datta, 2024). Digital adoption and marketing capabilities contribute to MSME resilience and sustainability in dynamic environments (Satpathy et al., 2025). Thus, sustainability is not just an end result, but a process supported by digital systems and adaptive marketing strategies.

This research focuses on the phenomenon of low visibility and use of digital support systems by MSMEs, as the object of field study. This phenomenon reflects the gap between the potential of digital marketing and practicality at the MSME level, hindering business growth and sustainability. By choosing this phenomenon as a focus, the case study approach will allow an in-depth investigation of the variables of digital visibility, digital support, and sustainability in the real context of MSMEs' daily interactions. This narrow focus allows for a comprehensive understanding of the internal and external dynamics that shape digital adaptive behavior by MSMEs, thus reflecting the complexity of real-life contexts.

2. Method

This study employed a qualitative case study approach to explore how digital marketing supported by digital systems influences MSME performance. The case study method was chosen because it enables an in-depth investigation of complex real-life phenomena within their natural context (Yin, 2018). The research was conducted in Yogyakarta, Indonesia, a region with a high concentration of MSMEs and active digital entrepreneurship initiatives.

A total of 12 MSMEs participated in the study, consisting of five food and beverage enterprises, four handicraft businesses, and three service-based MSMEs. Informants were selected using purposive sampling based on the following criteria: (1) MSMEs actively using digital marketing platforms, (2)

operating for at least one year, (3) having attempted digital adoption, and (4) business owners willing to participate in interviews. Informants were selected using purposive sampling to ensure information-rich cases (Bouncken et al., 2025).

Data were collected over a two-month period through semi-structured interviews, direct observations, and document analysis. The data were analyzed using the Miles and Huberman interactive model, which includes data reduction, data display, and conclusion drawing. Triangulation was applied by comparing interview results, observational findings, and documentary evidence to ensure credibility and reliability (Miles et al., 2014).

The research was conducted in Yogyakarta, Indonesia, a region with a high concentration of MSMEs and active digital entrepreneurship initiatives. A total of 12 MSMEs participated in this study, consisting of five food and beverage enterprises, four handicraft businesses, and three service-based MSMEs. These sectors were selected to represent diverse business characteristics and levels of digital adoption.

The informants were selected using purposive sampling to ensure that the data collected were relevant and information-rich. The selection criteria included:

- (1) MSMEs that actively use at least one digital marketing platform (such as social media or online marketplaces),
- (2) MSMEs that have been operating for at least one year,
- (3) MSMEs that have attempted to adopt digital tools or received digital marketing support, and
- (4) business owners who were willing to participate in in-depth interviews.

Data were collected over a two-month period through semi-structured interviews, direct observations, and document analysis. Interviews focused on the informants' experiences with digital marketing practices, challenges in using digital technologies, and the role of digital support systems such as training, infrastructure, and institutional assistance. Observations were conducted at the business locations to capture real-time digital marketing activities and operational practices. Supporting documents, including promotional materials, online store records, and social media content, were also analyzed to strengthen data triangulation.

The data were analyzed using the Miles and Huberman interactive model, which consists of data reduction, data display, and conclusion drawing. In the data reduction stage, interview transcripts and observation notes were coded to identify key themes related to digital visibility, digital support systems, and business sustainability. The data display stage involved organizing the findings into thematic matrices and narrative descriptions to identify patterns across MSMEs. Finally, conclusions were drawn by linking the empirical findings to relevant digital marketing and MSME sustainability theories.

To ensure the trustworthiness of the study, several rigor strategies were applied, including triangulation of data sources (interviews, observations, and documents), member checking with selected informants, and maintaining an audit trail of the research process. These procedures enhanced the credibility, dependability, and confirmability of the findings.

3. Results and Discussion

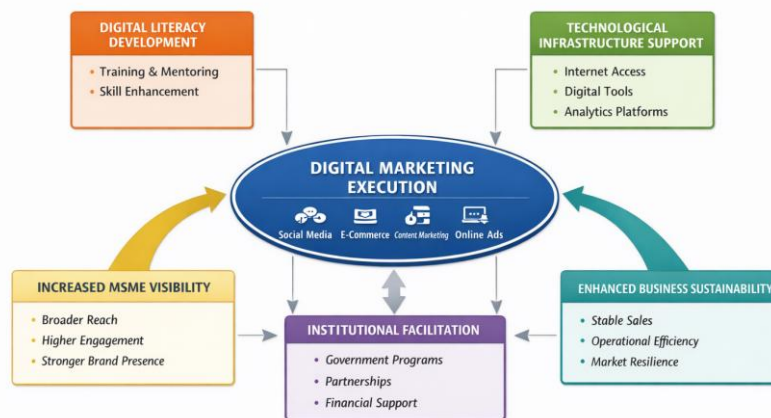
The findings of this study indicate that digital marketing adoption significantly improves MSME visibility, particularly through the use of social media and online marketplaces. Food and beverage MSMEs reported faster customer acquisition through visually engaging content, while handicraft businesses expanded their geographic reach using digital catalogs and online exhibitions. Service-based MSMEs benefited from improved customer retention through direct communication via WhatsApp Business and Google Business Profile. These results confirm that digital platforms reduce market entry barriers by enabling low-cost promotion and real-time interaction with customers.

However, the improvement in visibility was not uniform across all MSMEs. Enterprises that received structured digital support, such as digital marketing training, access to analytics tools, and technological infrastructure assistance, demonstrated stronger online engagement and more consistent content quality. MSMEs with higher digital literacy were better able to design strategic content, analyze customer responses, and optimize promotional campaigns. This suggests that digital capability development plays a mediating role between digital marketing adoption and performance outcomes. Digital tools alone are insufficient without the necessary skills and organizational readiness to use them effectively.

Despite the benefits of digital marketing, MSMEs continue to face structural constraints that limit their digital transformation. The most prominent challenges include limited digital skills, high costs of digital tools, and inadequate technological infrastructure. Many MSME owners experienced difficulties in managing paid advertisements, interpreting analytics data, and producing professional digital content. In addition, the financial burden associated with advanced digital tools restricted access for small businesses with limited resources. These barriers led to the superficial use of digital platforms, where MSMEs relied mainly on basic promotional activities without strategic planning. As a result, some MSMEs experienced short-term visibility gains without achieving sustainable business performance.

The role of digital support systems emerged as a critical factor in overcoming these constraints. MSMEs that participated in digital marketing training programs showed improved confidence in content creation, campaign management, and customer engagement strategies. Technological infrastructure support, such as stable internet access and user-friendly applications, enabled more consistent digital activity. Institutional facilitation, including mentoring and policy support, reduced adoption barriers and encouraged long-term digital engagement. These support mechanisms function as capability enhancers that transform digital marketing from a tactical activity into a strategic business process.

Figure 1. Digital Marketing Development Model Based on Digital Support System for MSME Visibility and Sustainability



In terms of sustainability, MSMEs that integrated digital marketing with structured support systems demonstrated greater resilience and adaptability. Sustainability outcomes were reflected in stable customer growth, consistent sales performance, improved operational efficiency, and stronger responsiveness to market changes. Digital tools supported by training and institutional assistance enabled MSMEs to maintain customer relationships, optimize inventory management, and improve service delivery. This confirms that sustainability cannot be achieved through digital promotion alone

but requires the integration of marketing strategies with capability development and infrastructural support.

Based on these findings, this study proposes a Digital Marketing Development Model consisting of four integrated components: digital marketing execution, digital literacy development, technological infrastructure support, and institutional facilitation. Digital marketing execution focuses on the use of social media, marketplaces, and digital content to enhance visibility. Digital literacy development strengthens MSMEs' ability to manage campaigns and analyze customer data. Technological infrastructure support ensures stable and efficient digital operations, while institutional facilitation provides mentoring, policy guidance, and financial access. The interaction of these components enables MSMEs to transform digital marketing into a sustainable business strategy.

The main contribution of this model lies in its integrative approach. While previous studies emphasize platform adoption, this research demonstrates that digital support systems determine the sustainability of digital marketing outcomes. The model shifts digital marketing from a short-term promotional tool to a long-term capability-building framework. This supports recent evidence that digital culture, creativity, and strategic support systems enhance MSME competitiveness and resilience in dynamic market environments.

Overall, the results highlight that digital transformation for MSMEs is not merely a technological issue but a systemic process involving skills, infrastructure, and institutional support. Digital marketing can enhance visibility, but sustainable performance depends on how well MSMEs are supported in developing the capabilities needed to use digital tools strategically. This study therefore provides both theoretical and practical insights into how integrated digital support systems can strengthen MSME visibility and sustainability in emerging digital economies.

Table 1. Summary of Qualitative Research Findings of MSMEs

Research Aspects	Key Findings	Interview Quotes
Benefits of Digital Media	<ul style="list-style-type: none"> ✓ Expanding the market ✓ Increase sales ✓ Strengthen branding 	<i>"Since the promotion through Instagram and TikTok, our sales have increased rapidly. Social media has been very helpful in expanding the market."</i> (Indonesian Original Honey)
Strategies Used	<ul style="list-style-type: none"> ✓ Promotion on social media (Instagram, TikTok, WhatsApp, Facebook) ✓ Marketplace (Shopee, Tokopedia, Bukalapak) ✓ Creative content (photos, videos) ✓ Special online promos and discounts 	<i>"We rely on photo and video content on social media. The impact is quite large, especially to attract new customers and strengthen branding."</i> (Wulung Bakery)
Main Obstacles	<ul style="list-style-type: none"> ✓ Lack of digital skills (managing ads, reading analytics, creating content) ✓ Expensive digital support 	<i>"We actually want to be more active in the marketplace, but the skills to create content and read analytics data are still lacking."</i> (Warung

	system costs	Kelontong Party)
	✓ Limited technological infrastructure (internet, devices)	“Digital support systems are good, but the cost is high. For a small business like ours, that’s a challenge.” (Momca Shop)
Support and Solutions	<ul style="list-style-type: none"> ✓ Support system of digital platforms ✓ Digital marketing training and education ✓ Support from relevant governments/agencies 	<p>“After participating in the digital marketing training, we learned how to optimize Instagram and WhatsApp Business for promotion.”</p> <p>(Lyh Snack & Cake)</p>

4. Conclusion

This study demonstrates that MSME visibility and sustainability are more effectively enhanced through an integrated digital marketing development model supported by digital support systems. While digital marketing platforms help MSMEs expand market reach and improve customer engagement, their long-term effectiveness depends on the availability of structured support mechanisms, including digital literacy development, technological infrastructure, and institutional facilitation. MSMEs that received such support showed stronger online presence, more consistent marketing performance, and greater adaptability to market changes.

The proposed model contributes to the digital marketing and MSME sustainability literature by emphasizing that digital transformation is not merely a technological process but a systemic capability-building effort. By integrating marketing execution with skills development, infrastructure support, and institutional assistance, MSMEs can shift from short-term promotional activities to sustainable digital strategies that strengthen business resilience and competitiveness.

From a practical perspective, the findings suggest that MSME empowerment programs should move beyond basic digital promotion training. Policymakers, business development institutions, and educational organizations should provide continuous mentoring, affordable digital tools, and supportive digital ecosystems to ensure inclusive and sustainable digital adoption among MSMEs.

Future research is encouraged to test this model using quantitative or mixed-method approaches across different regions and business sectors. Comparative studies may also explore how advanced digital technologies, such as data analytics and artificial intelligence, further enhance MSME sustainability in dynamic digital environments.

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