Digital Literacy Transformation: Digital Marketing Competence for Micro, Small, and Medium Enterprises (MSMEs)

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Abstract. In the rapidly evolving digital era, Micro, Small, and Medium Enterprises (MSMEs) are required to adapt to technological advancements to remain competitive. The onset of the COVID-19 pandemic accelerated the need for businesses to embrace digital marketing strategies, as those who successfully utilized these technologies were better able to survive and sustain their operations. This research aims to develop a digital marketing transformation model that enhances the competence of MSMEs, thereby increasing their revenue and market competitiveness. A qualitative research approach was employed, utilizing interviews, documentation, and observations to collect data from MSME business actors, local cooperative offices, and experts, particularly focusing on businesses that had participated in digital marketing training prior to the pandemic. The findings revealed that MSMEs with developed digital marketing skills were able to maintain and even grow their businesses during the pandemic. The implementation of a training model that integrates local wisdom and participatory learning principles was found to be particularly effective in enhancing digital marketing competencies among MSMEs. In conclusion, the structured adoption of digital marketing through targeted training models enables MSMEs to stay competitive, adapt to technological advancements, and improve their business outcomes. The novelty of this study lies in the development of a conceptual digital marketing model specifically tailored to MSMEs, combining traditional business practices with modern digital strategies to promote sustainable growth in a post-pandemic economy.

Keywords: competence; digital marketing; home industry

INTRODUCTION

The use of digital platforms is very important to support business activities. Nowadays, people prefer shopping that is faster and more convenient (Elhajjar, 2022). So, business people must adapt more to the times by utilizing technology (Melović et al., 2021). For consumers, the amount of information on product selection that is scattered on the internet due to increasingly free market competition has raised awareness to be able to choose the right product. If MSMEs do not set a strategy by providing products to drive business, MSMEs are at risk of going bankrupt (Kusumasari & Retnandari, 2021; Zahay et al., 2019). Here, social networks act not only as a tool for marketing products or services but also as a tool for interacting with customers to solve their own problems. During the Covid 19 pandemic, all face-to-face activities were stopped or severely restricted, causing the need for indirect access through other media (Gibson & Olivia, 2020; Khalifa et al., 2021). The

growth of digital transactions has begun to increase, causing disruption to the business and economic sectors such as the establishment of e-commerce and financial technology services which are increasingly widespread in society (Azzara et al., 2022; Gibson & Olivia, 2020). The development of the digital economy allows for the emergence of new business models that can improve the shopping experience (customer experience) because it prioritizes efficiency in meeting market needs.

The rapid development of technology, the digital world, and the internet of course also have an impact on the world of marketing. Marketing trends in the world are changing from conventional (offline) to digital (online). Digital marketing is more promising because it allows potential customers to get all kinds of information about products and make transactions via the Internet. Online marketing can increase product sales results because people nowadays tend to prefer to look for recommendations online and even buy products online (Dolega et al., 2021). Online marketing can also increase marketing reach that offline marketing cannot or is difficult to achieve (Huang & Wu, 2024; Xu et al., 2022). However, digital marketing is not about understanding the underlying technology, it is about understanding people, how they use this technology, and how they can use technology more effectively and must learn more about the quality of communication rather than being determined (Nair & Gupta, 2021; Purnomo, 2020).

The Covid-19 pandemic has spurred Indonesia to be faster in carrying out digital transformation (Gibson & Olivia, 2020; Khalifa et al., 2021). The digital transformation itself will be achieved after completing several previous stages, namely the digitization stage and the digitization stage. The digitization stage begins with changing the data which was originally still in the form of physical data into digital data. This step has been taken by Indonesia and is currently in the digitalization phase. Examples of activities such as online shopping, which will be the target for the next few years, must be done now. This means Indonesia is taking a big leap to accelerate its digital transformation (Lomagio & Fitrianti, 2022). SMEs often do not realize the importance of innovation, the ability to understand what to digitize, which technology to use, how to prioritize goals, and which organizational changes (eg skills and roles) are needed (Farhan et al., 2022). Digital use by MSMEs often encounters challenges because MSMEs have limited resources in terms of digital innovation. Therefore, it is important to learn more about the ways in which MSMEs can adopt technology to improve their business processes and revenues.

Empirically, the digital literacy skills of MSMEs require adaptation efforts in the form of training (learning) because the demands of the times, especially the industrial revolution 4.0, require them to master ICT (Farhan et al., 2022; Purnomo, 2020; Wahyudin et al., 2019). The facts illustrate that the challenges of RI 4.0 with changing the way MSME businesses do business include: first, it is easy to find product information desired by the public, demanding that MSME actors must have digital platforms such as Instagram, Facebook, WhatsApp which can be strategic tools to market their products (Hufad et al., 2017; Wahyudin et al., 2019). The public can find out about the products offered easily so that prospective buyers can make comparisons with other products before making a purchase transaction. Second, there are various features on the digital platform that enable MSME actors to take advantage of the convenience of these features to create an attractive appearance for the products being sold. An attractive product appearance can influence the decision of prospective buyers and provide a positive assessment of the product image. Third, the existence of digital marketing allows entrepreneurs to immediately pay attention to feedback from consumers and can decide what adjustments must be made regarding product content for better results more quickly (Hermawati et al., 2021; Purnomo, 2020).

The importance of conventional to digital transformation in the marketing process (marketing), because it will relate to other important components in business processes (Caliskan et al., 2021; Peruta & Shields, 2018). Some of these related components include the problem of increasing capital, the production output decreasing due to the small number of orders coming in, only a few MSME actors having branches outside the city and the rest relying solely on the market in the area which they inherited from their parents. In addition, business actors feel that they are not optimal in developing the knowledge and skills they have to develop their business. Business actors feel tied to ancient traditions which make them less able to adapt to the demands of

changing times (Surya & Muhammadiyah, 2021; Wijaya et al., 2017). Technology has the ability to open up new markets and shake up existing ones. The existence of digital technology, the internet, the software applications that run on it, and the devices that enable people to connect to networks and to one another whenever, wherever, and in any way they want, have had an impact on everything that has gone before. This has influenced the emergence of digital marketing. The digital marketing trend is an opportunity for businesses to welcome the industrial era 4.0. Digital marketing or what can be called digital marketing is an effort or method to market a brand or product using supporting media in digital format (Musnaini & Mudhita, 2022). This method can reach consumers in a personal, relevant, and specific manner according to the needs or desires of consumers.

This study aims to analyze the transformation of digital literacy in developing digital marketing competence for Micro, Small, and Medium Enterprises (MSMEs). By utilizing training and mentoring based on andragogical principles, the research explores how MSMEs can adapt to digital technology to enhance their marketing strategies and improve competitiveness. The urgency of this research lies in the need for MSMEs to adapt in the digital era, where traditional marketing is no longer sufficient. Digital literacy is crucial for MSMEs to remain relevant and competitive in an increasingly globalized and technology-driven market. This study contributes significantly to the development of digital training strategies for MSMEs, focusing on the implementation of participatory and experiential learning methods. The findings are expected to serve as a reference for designing effective digital marketing competency development programs for MSMEs and provide new insights for academics and practitioners in the field of economic empowerment through digital technology.

METHODS

The study employed a qualitative research design to develop a conceptual model for digital marketing transformation tailored to Micro, Small, and Medium Enterprises (MSMEs). This approach was selected to gather in-depth insights into the practical challenges MSMEs face and to evaluate the effectiveness of training programs aimed at improving their digital competencies.

The participants included MSME business owners who had been operating for at least five years and had received digital marketing training before the COVID-19 pandemic. Additionally, representatives from local MSME forums, the Cooperative Office, and experts in business management and digital marketing contributed to the study.

Data collection was carried out using a combination of interviews, focus group discussions (FGDs), observations, and document reviews. The interviews captured the business actors' experiences with digital marketing, their challenges, and the results of implementing these strategies. FGDs were conducted to gather collective insights from MSME forums and Cooperative Office representatives, while observations during the training sessions provided real-time data on participant engagement and learning processes.

To ensure the validity of the data, the researchers employed triangulation by cross-referencing information from interviews, FGDs, and observations. This method enhanced the reliability of the findings and provided a comprehensive understanding of the training's impact on MSME participants.

Thematic analysis was used to analyze the data, identifying recurring themes related to digital marketing competencies, the effectiveness of the training, and the business outcomes observed. The analysis process was iterative, with key insights being refined as new data emerged throughout the study.

RESULTS AND DISCUSSION

The training participants, who were mostly adults, made the methods and strategies for delivering the material involved training participants with an emphasis on practice (Johnson et al., 2020; Jones et al., 2021).

Therefore, the digital transformation learning process for MSMEs is carried out by implementing training and mentoring with the principles:

Digital marketing is widely used to promote products or services and reach consumers through digital channels. Before turning to digital marketing, traditional marketing was the most recognized form of marketing. Traditional marketing is a non-digital way used to promote a business's product or service. On the other hand, digital marketing is the marketing of products or services using digital channels to reach consumers (Yasmin et al., 2015). Digital marketing is the use of the Internet and information technology to extend and enhance traditional marketing functions. Some comparisons between traditional marketing and digital marketing are:

Table 1. Differences between traditional marketing and digital marketing

No	Traditional Marketing	Digital Marketing
1.	Traditional marketing includes print, broadcast, direct mail, and telephone	Digital marketing includes online advertising, email marketing, social media, text messaging, marketing, search engine optimization
	No interaction with consumers	There is interaction with consumers
2.	Promotion through advertising is planned over a long period of time	Promotion through advertising is planned in a short time
	The process is expensive and time-consuming	A fairly cheap and fast way to promote a product or service
3.	Limited reach to customers due to a limited number of subscriber technologies	Wider reach to customers due to the use of different customer technologies
	There is no ability to go viral	Ability to go viral
4.	One way conversation	Two-way conversation
5.	Responses can only occur during business hours	Responses or feedback can happen at any time

Source: (Yasmin et al., 2015)

Strategies for using digital marketing include questions about who you are, what you offer and to whom, and why and how you do it (Yasmin et al., 2015). These steps and questions cover what businesses should pay attention to when creating and implementing a strategy that will meet their objectives. There are six steps in developing a successful digital marketing strategy (Stokes, 2011), namely:

Figure 1. Six Steps in Developing a digital marketing strategy

Context. The context of a digital marketing strategy includes the following questions: (a) Who are you and what is your identity that makes you useful?, (b) Who are your customers and what needs and wants do they have?, (c) Who are your competitors? This may go beyond the organizations you are competing with on price and product, and it can also be competition in abstract forms such as time and mindshare. (d) Where do you operate your business (looking at social, political, and economic factors) and how will this change in the future? To answer these questions, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is an ideal way to understand a business and market.

Objectives. Digital marketing has technology at its heart. It is therefore important to involve both technical and aesthetic efforts in the early stages of strategy formulation. Goals leading to the systems and tools provided by technology should be the starting point in the process of developing strategic goals.

Value-exchange. Digital can achieve a lot in terms of users and value creation. After the business actor determines what is meant by success and has described the main objectives of his business, the business actor can examine other goals that support this goal.

Tactics and evaluation. Various digital tools and tactics are available after the business actor determines the digital marketing goals to be carried out. The strength of this tool depends on the type of goal set for the brand, for example, acquisition (or getting new customers) is probably best driven by paid search, while email is one of the most effective tools for selling more products to existing customers.

Metrics. Metrics are important in determining the value of a successful value exchange for the organization and how this value will be measured. Business actors need to prepare analysis and measurement tools from the start in the online strategy formulation phase that will make it possible to measure the business being carried out.

Ongoing optimization. The increasing need for businesses to remain dynamic and agile with regard to metrics, and strategy formulation, is becoming an ongoing process of refining and optimizing tactics. Experience and travel managing a business is very important to build a successful business. Information on business innovation is also valuable for developing an online business. This insight can be used to make strategic decisions and take action in various areas, from product roadmaps to service improvements.

Principle of Andragogy Learning

Adult learning is essential to create a positive learning environment, particularly a psychological atmosphere that fosters mutual respect, trust, support, and openness. An enjoyable and inclusive environment encourages learners to participate fully, making them feel valued and motivated (Fernández-Gavira et al., 2021). A sense of togetherness and fun can significantly impact an adult's willingness to engage in the learning process. Involving learners in the planning of their learning journey is crucial. When learners have a say in how their learning is structured, they become more committed and invested in the process (Heilporn et al., 2021). This collaborative approach helps learners take ownership of their education, aligning it with their personal goals. It is important to encourage learners to diagnose their own needs. This step empowers individuals to reflect on their strengths and weaknesses, helping them identify areas where they need improvement or additional knowledge. It also promotes self-awareness, a key component of effective adult learning. Learners should be actively involved in developing learning objectives. When adults contribute to defining the goals of their education, they can better align their learning with their professional or personal aspirations, this sense of purpose enhances motivation and commitment to the learning process (Sherman, 2021).

Learners should participate in designing their lesson plans. By having a hand in shaping the structure of their lessons, they can ensure that the material is relevant, practical, and tailored to their needs. This customization leads to more meaningful learning experiences. Educators must assist learners in carrying out their lesson plans, this includes providing guidance, resources, and support to help them navigate their learning journey. Educators play a crucial role in facilitating the application of knowledge and ensuring that learners can successfully implement their plans (Haleem et al., 2022). Self-assessment is a critical component of adult learning, as it encourages reflection on progress and fosters accountability. By regularly assessing their achievements and areas for improvement, learners can adjust their strategies and continue to grow in their

knowledge and skills (Granberg et al., 2021). Incorporating these steps into the andragogical learning process creates a more dynamic and personalized experience for adult learners, allowing them to thrive in both their personal and professional development.

The learning process can occur well if the learning method involves participants (Hossen, 2016). Self-involvement (participant ego) is the key to success in adult learning. Therefore, educators should be able to help participants: (1) define their learning needs, (2) formulate learning objectives, (3) take responsibility for planning and preparing learning experiences, and (4) participate in evaluating the process and results of activities Study. Thus, every educator must involve participants as optimally as possible in learning activities. For adults, creating a conducive learning atmosphere is the basis for encouraging them to try new behaviors, dare to be different, act with new attitudes, and want to use the new knowledge they have learned (Scholtz, 2023). Therefore, in andragogy learning must do a lot, it is not enough just to listen and absorb (Bengo, 2020). Learning methods that can be used are:

In delivering learning materials, one effective method for providing information is through lectures. Lectures involve the verbal presentation of content by the instructor to trainees, aiming to convey general and informative material that aligns with the learning objectives. This method is particularly useful for presenting foundational knowledge or large amounts of information to a group, as it allows for clear, structured communication from the instructor to the participants. While lectures may be seen as more traditional, they remain a valuable tool when the goal is to provide a comprehensive overview of a topic or introduce new concepts.

The learning focus is on solving problems, more interactive methods like brainstorming and discussions are highly effective. Brainstorming encourages participants to generate multiple ideas or solutions in response to a problem posed by the instructor (Foster, 2021). This technique allows for creative thinking and the rapid generation of ideas, which can lead to innovative problem-solving (Wöhler & Reinhardt, 2021). Discussions, on the other hand, involve two or more participants interacting and exchanging opinions to collaboratively solve problems. This method fosters critical thinking, mutual understanding, and consensus-building. Additionally, for skill-based tasks, assignment methods like drills and simulations are ideal. Drills provide participants with opportunities to practice specific skills under the guidance of the instructor, while simulations offer a realistic, yet controlled, environment where participants can apply their learning in situations that mimic real-life challenges. Both methods enhance the practical application of knowledge and help learners build confidence in their abilities.

The learning process begins by exploring the experiences (experiencing something) of the participants, which can take the form of activities/activities, brainstorming, or exploring feelings about activities that have been carried out or that will be planned (Hamed & Rivero, 2024). In order to be able to learn from "experiencing" (experience) the participants must do something beyond the experience they already have (Reeves et al., 2021). Experience in this learning must be a reflection of a condition when it happened, why it happened, what were the consequences, and so on (Leithwood et al., 2021). From the results of the exploration, it was concluded what was good and what was not, why, what happened, and what didn't. While the methods used include lectures, varied lectures, brainstorming, discussions, and simulations.

Participatory Principle

The participatory principle in planning a training program is the involvement of all parties in developing program needs (Li et al., 2020). Not only the training organizers but the instructors and prospective trainees participate in compiling the needs of the training program. The general training needs that have been prepared together with the instructors and trainees, are then followed up by compiling learning materials that are relevant to the needs of the trainees (Fauth & González-Martínez, 2021; Yang et al., 2020). Participatory learning activities that are centered on participants are rooted in the idea that the learning process should be adapted to the characteristics of the learners themselves. On adult learning theory (andragogy) supports this, suggesting that adult learners are more motivated when they feel that their individual needs and experiences are acknowledged (Abedini et al., 2021). The focus on participants as key stakeholders in the planning and

execution of learning activities enhances their engagement and ownership of the process. By making learners feel that the training is tailored specifically for them, they are more likely to take responsibility for their learning outcomes. When participants play an active role in shaping their educational experience, they internalize the learning more effectively, fostering both cognitive and emotional engagement in the learning process.

Departing from experiential learning. Participatory learning draws heavily on participants' prior knowledge and real-world experiences (Korucu-Kış, 2021). This aligns with the experiential learning model, which suggests that learning is most effective when it is based on the learner's previous experiences and is linked to practical applications. In this model, problem-solving plays a critical role, as it encourages learners to engage in reflective observation and active experimentation, which are key components of Kolb's experiential cycle. Adults are typically problem-centered in their learning orientation. They seek knowledge that can immediately address real-life challenges, and this practical orientation is fundamental in participatory learning models (Abedini et al., 2021). In the context of digital marketing transformation, for example, training materials must be highly relevant to the participants' work environments, tailored to their existing skill levels, and directly applicable to their professional roles. This ensures that the learning is not only theoretical but also practical, reinforcing the immediate usability of the knowledge. Furthermore, when training materials are based on identified learning needs, adult learners are more likely to be motivated and successful in achieving their learning goals (Chukwuedo et a., 2021). This need-based approach ensures that the training is relevant, focused, and effective in addressing the specific challenges faced by the participants.

Local Wisdom

Empowerment efforts in communities are deeply intertwined with sociocultural issues and are often reinforced by local values and wisdom that promote harmony and cohesion. Incorporating local wisdom into empowerment initiatives ensures that these efforts are culturally relevant and effectively address the unique needs of the community (Damopolii et al., 2024). This approach emphasizes the importance of respecting and leveraging the local knowledge possessed by community members. Such knowledge includes insights into their needs, strengths, and unique characteristics. Community workers should act as listeners and learners rather than as instructors, thereby valuing the expertise that local people bring to the table and integrating this wisdom into the empowerment process.

In addition to respecting local knowledge, working in solidarity with community members is crucial. Community workers must engage collaboratively with locals, understanding their goals, aspirations, and the social dynamics at play (Hetherington & Forrester, 2022). This solidarity fosters a cooperative environment where empowerment efforts are more likely to be successful. By working together and aligning initiatives with the community's cultural values, these efforts can enhance their effectiveness and sustainability. For instance, in the context of digital marketing, tailoring strategies to fit local cultural contexts and leveraging community insights can significantly boost the effectiveness of programs aimed at increasing the income of business actors. This culturally sensitive approach ensures that training and empowerment programs are not only practical but also resonate with the community's values and practices.

Figure 2. Transform model construction
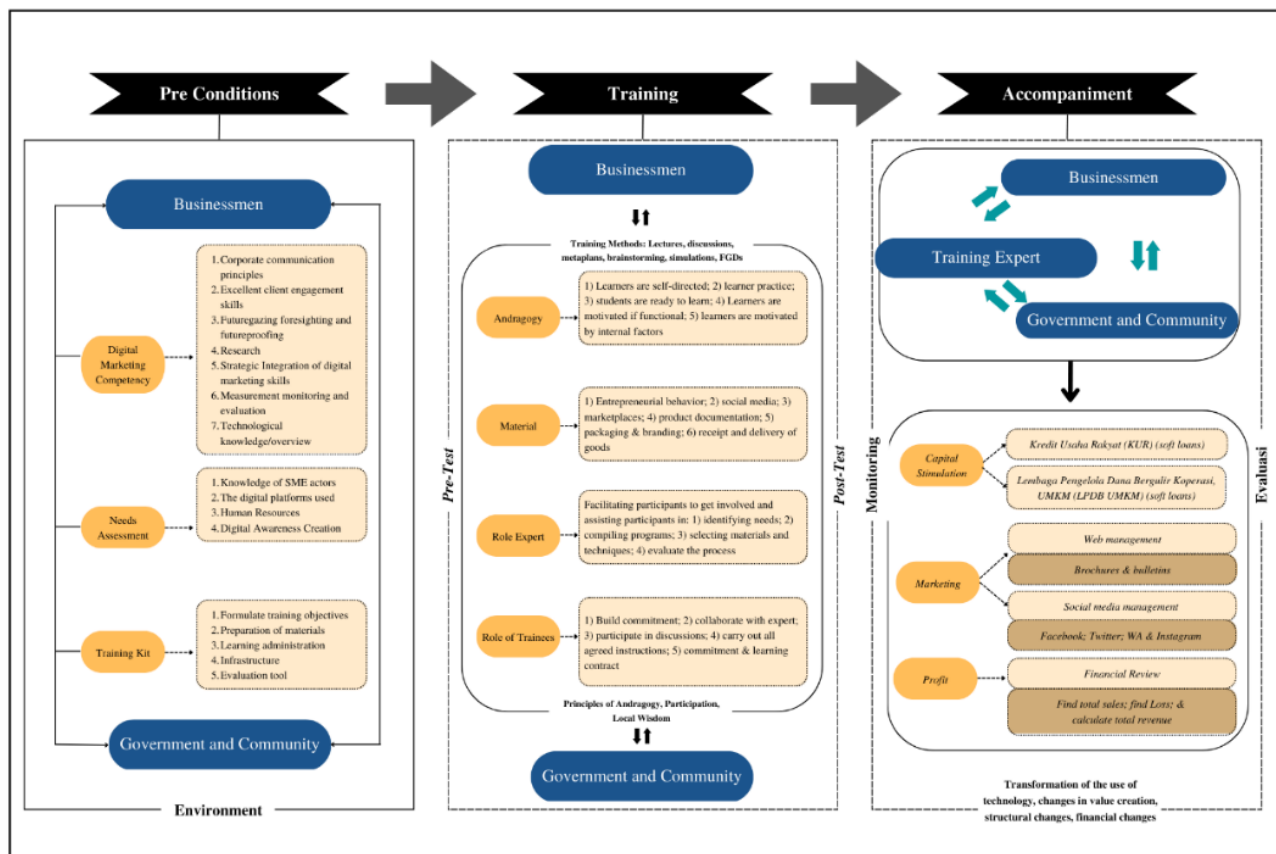
The model depicted in the figure outlines a comprehensive approach to transforming digital marketing competency for Micro, Small, and Medium Enterprises (MSMEs) through a structured process involving preconditions, training, and accompaniment. In the Pre-Conditions phase, the focus is on assessing the needs of business owners, understanding the platforms and digital tools used, and establishing foundational knowledge. This stage emphasizes building digital marketing competency, which includes key aspects such as corporate communication principles, digital awareness, and strategic integration of marketing skills. The role of the government and community in this phase is to provide support, such as infrastructure, training kits, and tools for evaluating readiness. This ensures that MSMEs are well-prepared for the digital transformation journey.

During the Training phase, the process moves into more active learning, employing principles of andragogy that are well-suited for adult learners. The methods used here include lectures, discussions, and hands-on activities like simulations and brainstorming sessions. The training focuses on practical digital marketing skills such as social media management, product documentation, and e-commerce transactions. The role of the expert in this phase is to guide participants through these learning activities, helping them identify their needs, select appropriate techniques, and apply their learning to real-world scenarios. The involvement of the government and community continues, offering an environment that promotes participation and experiential learning based on local wisdom.

In the final Accompaniment phase, the model highlights the ongoing support provided to MSMEs after the initial training. This phase involves post-training evaluation, monitoring, and mentoring by experts and government entities. Capital stimulation, marketing assistance, and financial monitoring are crucial elements in this phase, ensuring that MSMEs can implement what they have learned. Tools such as social media management and financial review are employed to track progress and make necessary adjustments. The transformation model ultimately seeks to enable MSMEs to utilize digital technology effectively, leading to changes in value creation, structural shifts, and improved financial outcomes.

CONCLUSION

The study's findings indicate that MSMEs can effectively enhance their digital marketing capabilities when training programs are designed with an emphasis on adult learning methods, hands-on activities, and continuous mentoring. By leveraging local wisdom and focusing on real-world applications, participants gained practical skills in digital marketing, resulting in improved business performance. The research concludes that the success of the digital marketing transformation model relies on the collaborative efforts of the government, community, and experts to provide continuous support. The training and post-training accompaniment phases are critical for ensuring that MSMEs can integrate digital tools into their operations, contributing to financial growth and market competitiveness. According the findings, it is recommended that future training programs for MSMEs adopt this digital marketing transformation model to foster sustainable growth. Additionally, the government and local communities should continue to support MSMEs by providing infrastructure, mentorship, and resources tailored to the specific needs of business actors, particularly those rooted in local cultural contexts. This approach ensures that digital transformation aligns with both global trends and local values, leading to long-term business resilience and economic development.

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