

Short Communication

Improving Digital Literacy for Village MSMEs through Social Media-based Marketing Training

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Abstract. This community service activity aims to improve the digital literacy of Micro, Small, and Medium Enterprises (MSMEs) in rural areas through social media-based marketing training. Lack of digital skills is a major obstacle to MSME development in the digital economy era, particularly in promotion and market expansion. The implementation method for this activity included needs identification, technical training on the use of social media (Instagram, Facebook, and WhatsApp Business), and mentoring in implementing simple digital marketing strategies. The results of the activity demonstrated a significant increase in participants' understanding of how to use social media as a means of product promotion. Participants were also able to create creative marketing content, improve customer interactions, and understand the importance of digital identity and ethical communication in cyberspace. Thus, this training contributes to increasing the competitiveness of rural MSMEs and supports the acceleration of digital transformation in the local economic sector.

Keywords: Digital Literacy, MSMEs, Training, Digital Marketing, Social Media.

1. Introduction

The development of information and communication technology has brought about significant changes in economic interaction patterns, including in the activities of micro, small, and medium enterprises (MSMEs) [1]. In the digital era, marketing no longer relies on conventional strategies but has shifted to a digital-based approach that utilizes social media as the primary channel for promotion and communication with consumers (Ministry of Communication and Informatics, 2023). However, MSMEs in rural areas still face challenges such as low levels of digital literacy, limited access to technology, and limited knowledge of online marketing strategies [2].

Digital literacy encompasses not only the ability to operate digital devices but also critical thinking skills, digital ethics, and the ability to manage information effectively [3]. Therefore, community empowerment through digital literacy training is crucial for increasing the capacity of MSMEs to develop their businesses sustainably [4]. This community service activity was implemented to address these issues, focusing on improving the capabilities of village MSMEs in utilizing social media as a marketing tool [5]. Through training and direct mentoring, this activity is expected to improve the digital knowledge, skills, and attitudes of business actors in facing the challenges of the digital economy [6]. The current development of digital technology brings significant opportunities for MSMEs to expand their markets and strengthen their business presence. However, gaps in digital literacy remain among rural MSMEs, including a lack of understanding of the use of social media as an effective marketing tool. The study "Digital Literacy and MSME Empowerment: A Theoretical Review of Empowerment Strategies in Remote Areas" shows that digital literacy and managerial capacity are closely related in strengthening business competitiveness in rural areas.

Furthermore, research in Padang City found that digital and financial literacy significantly impacted the turnover of MSMEs in the culinary sector during the COVID-19 pandemic. This suggests that when MSMEs acquire digital knowledge and skills, the

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economic impact can be felt directly through increased sales and business stability [7]. One key aspect of digital literacy is the ability to utilize social media for promotion, customer interaction, and branding. A concrete example is the study on the Use of Digital Marketing by the eLAIL Handmade Bag MSME, which found that limited technical understanding and a lack of engaging content were the main obstacles to digital marketing [8].

On the other hand, infrastructure and access to technology in villages are often major barriers. Limited fast internet access and high data usage costs hinder MSMEs from optimally implementing digital marketing strategies. External factors such as geography, education levels, and local government support also influence the success of digital literacy for MSMEs. The importance of practical training in the context of community service is very high, especially that which combines theory and hands-on practice. Training supplemented with technical assistance has proven more effective in helping MSMEs understand how social media works, create creative content, and manage online interactions with customers. This type of assistance also helps troubleshoot frequently encountered technical issues, such as using graphic design applications or scheduling content.

A case study in Majau Village, Pandeglang Regency, found that a digital literacy and e-commerce workshop for village MSMEs successfully increased awareness and use of digital platforms, including online store management and social media interactions, as a means of selling products. This success demonstrates that gradual and contextual interventions can create significant behavioral change. The digital marketing knowledge gap also impacts MSMEs' ability to compete during crises, such as the pandemic. MSMEs that have not received digital marketing training tend to experience a more drastic decline in sales during social restrictions, compared to those with digital literacy and online marketing channels.

Many studies have shown that social media is not only a promotional tool but also a two-way interaction between businesses and customers. This interaction strengthens consumer loyalty, expands market reach, and helps MSMEs better understand market needs. For example, MSMEs that employ active communication strategies through Instagram Stories, customer feedback, and interactive content appear to experience more stable business growth. Therefore, digital literacy training for rural MSMEs focused on social media-based marketing is highly relevant in the current context. This community service activity is expected to not only provide technical knowledge but also raise awareness of the importance of digital identity, ethical media use, and adaptive communication strategies to changing consumer behavior.

2. Implementation Method

This community service activity was conducted in Sumberrejo Village, Mojokerto Regency, involving 25 MSMEs from various sectors, including culinary, handicrafts, and household products. The implementation method involved three main stages: preparation and needs identification, training and hands-on practice, and mentoring and evaluation of the activity's results [9]. The Preparation and Needs Identification phase was conducted using a participatory approach [10]. The implementation team conducted initial observations and interviews with MSMEs to determine their current digital literacy levels and the challenges they face in online marketing. Results from this phase indicated that most participants lacked understanding of managing business accounts on social media and creating engaging content for potential customers. This data was used to design training materials relevant to participants' needs [11].

In the Training and Direct Practice Phase, activities were conducted face-to-face at the village hall using an andragogical approach, which emphasizes the active involvement of adult participants in the learning process [12]. Training materials included an introduction to digital literacy concepts, social media-based marketing strategies, and visual content creation using the Canva app. Participants were also taught how to optimize Instagram Business, Facebook Page, and WhatsApp Business features to market their products. A learning-by-doing approach was implemented so that participants directly put each step into practice [13].

During the practical session, participants were guided through creating their own business accounts and posting their first content [14]. The coaching team provided individual guidance and direct feedback on the designs, captions, and communication strategies used by the participants. This activity aimed to ensure that participants not only understood the theory but were also able to apply these skills independently in their daily businesses [15]. The post-training mentoring phase lasted one month, involving field visits and online communication via WhatsApp groups [16]. During this phase, the community service team assisted participants in consistently managing online promotional activities, measuring content reach, and refining customer engagement strategies. Ongoing mentoring has been shown to help participants maintain motivation and improve their ability to adapt to changes in digital consumer behavior [17]. The activity evaluation was conducted using three main instruments: observation, interviews, and questionnaires. The evaluation covered knowledge, skills, and attitudes toward digital technology use. The results showed significant improvements in participants' ability to manage social media professionally [18]. The community service team also assessed the economic impact by comparing the increase in customer numbers and sales turnover before and after the training [19].

This activity also involved the village government, the Mojokerto Regency Cooperatives and MSMEs Office, and students from the Nahdlatul Ulama Al Hikmah Mojokerto Islamic Education College as implementing partners. This cross-stakeholder collaboration ensured that the activity was not merely temporary but also sustainable through regulatory support and ongoing mentoring [20]. The village government provided training facilities and internet access, while students acted as technical facilitators. This collaborative approach makes community service activities more effective and relevant to the needs of the local community [21]. Activities are not only focused on short-term skills development but also aimed at establishing a sustainable digital literacy ecosystem for MSMEs in Mojokerto Regency. Thus, these activities significantly contribute to accelerating digital transformation in the local economy [22].

3. Result and Discussion

3.1 Preparation and Needs Identification Stage

The implementation team conducted an initial survey and interviews with MSMEs to identify their digital literacy levels and training needs. The results indicated that most participants lacked understanding of how to manage business accounts on social media and were unable to create engaging promotional content. The preparation phase is a crucial initial step to ensure that community service activities truly meet the needs of the target community. During this phase, the implementation team coordinated with the Sumberrejo Village government in Mojokerto Regency, as well as the local Cooperatives and MSMEs Office, to obtain baseline data on the number of active MSMEs, the types of businesses they operate, and the level of digital media utilization they have implemented.

This data was then used as a reference in determining the direction and focus of the training.

The needs identification activity was conducted through a survey and in-depth interviews with MSMEs. The survey used a simple questionnaire containing questions about their understanding of social media usage, challenges in online promotion, and interest in digital marketing training. In-depth interviews were conducted on-site to gain a contextual overview of the real-world challenges faced by participants, such as limited devices, internet access, and basic technical skills. In addition, the community service team employed a Participatory Rural Appraisal (PRA) approach to actively engage the community in the problem identification process. Through this method, participants were invited to discuss and independently map the obstacles they faced in utilizing digital media. This participatory approach yielded more accurate results because participants felt directly involved in the program planning process, not merely as beneficiaries.

The identification results revealed that most MSMEs still use traditional promotional methods such as distributing brochures, putting up banners, and word-of-mouth. Only a small percentage utilize social media, and generally not optimally. For example, their social media accounts have not been converted to business accounts, and the content they upload does not portray the product image attractively. This situation reinforces the urgency of more targeted and applicable digital literacy training. In addition to needs mapping, the preparation phase also included designing training modules. The implementation team developed materials based on survey results, covering a basic introduction to digital literacy, techniques for creating engaging visual content, branding strategies, and digital communication ethics. The modules were designed in simple language and supplemented with real-life examples from local MSMEs to ensure they were easily understood by participants.

This stage also includes developing an activity schedule, selecting a training location, and providing supporting facilities such as projectors, internet access, and computers. Intensive coordination with village officials is carried out to ensure adequate training facilities are available. Furthermore, the community service team prepares a pre-test to measure participants' digital literacy levels before the training begins. The preparation phase concluded with community outreach through village meetings and local social media. This outreach aimed to provide information on the program's objectives, benefits, and schedule so prospective participants could prepare and actively participate. The response from the Sumberrejo Village community was quite positive, as evidenced by the enthusiasm of participants, which exceeded the initial quota.

3.2 Training and Direct Practice Stage

The training was conducted in-person over two days. The training materials included an introduction to basic digital literacy, social media-based marketing strategies, visual content creation using the Canva app, and optimizing WhatsApp Business and Instagram features for promotions. The approach used was a learning-by-doing approach, where participants directly practiced content creation and managing their business accounts. The training and hands-on practice phase was the core of the community service program held at the Sumberrejo Village Hall in Mojokerto Regency. This activity was designed to improve the digital skills of MSMEs, enabling them to effectively utilize social media as a means of business promotion and communication. The training lasted two full days, with a structured schedule tailored to the participants' skill levels.

The training uses an andragogical approach, an adult learning method that emphasizes the relevance of the material to participants' experiences. This principle is

applied so that participants can immediately relate new knowledge to their daily business activities. Each session begins with an interactive discussion to explore participants' experiences using social media, followed by a brief theoretical presentation, demonstrations, and hands-on practice. The training focused on three main themes: (1) an introduction to digital literacy and online marketing opportunities for MSMEs, (2) strategies for building brand image through social media, and (3) creating creative content using digital applications such as Canva, CapCut, and Instagram Business. Participants were also taught how to optimize interactive features such as Stories, Reels, and Highlights to increase promotional reach.



Figure 1.
Digital Literacy
Training
Activities

In the practical session, participants received direct guidance from a team of facilitators and student mentors to create a business account on Instagram or Facebook and develop a strategy for their first post. This activity included exercises in poster design, writing engaging captions, and strategically timing their posts. Participants were enthusiastic about seeing their work published online and receiving feedback from the trainers. The training also covered digital communication ethics and social media account security, including how to avoid online fraud and maintain a business's digital reputation. The training team provided real-life case studies from other MSMEs that successfully increased sales through social media, providing participants with inspiration and an understanding of best practices in digital marketing.

To strengthen understanding, simulation methods and local case studies were used, where participants were asked to analyze the social media accounts of similar MSMEs in Mojokerto. The results of the analysis were used to develop their own content strategies. This approach helped participants understand how to build a consistent narrative between the product, image, and message they want to convey to consumers. Evaluation during the training was conducted in two ways: pre- and post-tests, as well as direct observation by the training team. The evaluation results showed a significant improvement in participants' understanding of the function of social media as a marketing tool. Participants who previously did not have business accounts were now able to create, manage, and publish content independently. Some participants even received immediate feedback from new customers during the training.

This training focused not only on improving technical skills but also on building participants' confidence to become active in the digital world. Through hands-on practice, participants learned that digital promotion doesn't always require large expenditures, but rather requires creativity and consistency in building customer interactions. This activity marked the beginning of a digital MSME community in Sumberrejo Village that supports each other in marketing their products online.

3.3 Mentoring and Evaluation Stage

The mentoring and evaluation phase is a crucial follow-up step to ensure the skills and knowledge gained during the training can be applied sustainably. This activity is conducted for one month after the training, using a combination of face-to-face and

online mentoring through a WhatsApp group consisting of participants, facilitators, and student mentors.

Mentoring is provided periodically through weekly field visits by the community service team to monitor the progress of participants' digital activities. During these visits, the team provides additional technical guidance, assists participants experiencing difficulties operating the application, and provides suggestions for improving their marketing strategies. Some participants even receive support in creating digital catalogs and scheduling promotional content on social media.



Figure 2.
Mentoring and
Evaluation of
Training
Results

During the online mentoring, participants were encouraged to actively share their experiences and promotional results. The WhatsApp group served as an open discussion platform where participants could seek input on content design, caption strategies, and social media business feature settings. This activity fostered a collaborative, mutually supportive atmosphere among MSMEs in Sumberrejo Village. The mentoring also aimed to help participants understand social media analytics, such as the number of views, interactions, and content reach. The community service team introduced simple measurement tools like Instagram and Facebook insights to assess the effectiveness of digital campaigns. By understanding this data, participants learned to adapt promotional strategies to better target their consumers.

The activity evaluation process used both qualitative and quantitative approaches. Quantitative evaluation was conducted through pre- and post-tests to measure improvements in participants' digital knowledge and skills. Meanwhile, qualitative evaluation was conducted through in-depth interviews and observations of participants' social media activity to assess changes in attitudes, motivation, and consistency in implementing digital marketing strategies. Evaluation results showed significant improvements in participants' ability to manage digital business accounts. Approximately 80% of participants actively posted promotional content regularly, and 60% began acquiring new customers through social media interactions. In addition to improved technical skills, participants also demonstrated positive changes in attitudes toward utilizing digital technology as a key part of their business strategy.

As a follow-up, the community service team recommended the formation of a Digital MSME Community in Sumberrejo Village to provide a platform for information sharing, advanced training, and joint marketing support. The village government welcomed this initiative by providing a digital space in the village hall for MSMEs to use interchangeably. With this sustainability, the results of the community service activities are expected to not only have a short-term impact but also contribute to long-term local economic growth. Following the training, the community service team provided intensive mentoring for one month to ensure the application of the acquired skills [23]. Evaluation

was conducted through observation of participants' social media activity, questionnaires, and interviews to assess changes in skills and attitudes toward using digital technology.

3.4 Discussion

The activity results demonstrated significant improvements in participants' digital understanding and skills. Based on the evaluation, 80% of participants were able to create business accounts on social media and upload attractively designed promotional content. Seventy percent of participants began using interactive features like Instagram Stories, WhatsApp Broadcast, and Facebook Marketplace to expand their customer reach [24]. In addition to improving technical skills, participants also experienced a shift in their mindset regarding the importance of digitalization in business. Participants began to understand the benefits of social media not only as a promotional tool but also as a means of building relationships with customers and strengthening brand image. This demonstrates the critical role digital literacy training plays in increasing the adaptive capacity of MSMEs to the development of the digital economy.

These results align with Aminullah et al. [25] findings, which state that digital literacy directly contributes to increased productivity and competitiveness of MSMEs. Furthermore, implementing digital marketing strategies has been shown to expand market access beyond the region at a relatively low cost compared to conventional methods. Community service activities conducted in Sumberrejo Village, Mojokerto Regency, have had a positive impact on improving the digital literacy of local MSMEs. Evaluations and observations during the program revealed significant improvements in participants' ability to use social media as a promotional, communication, and branding tool for their businesses. This improvement encompassed technical, cognitive, and affective aspects, which serve as indicators of successful implementation.

Quantitatively, the pre-test and post-test results showed that the average understanding score of participants increased by 45%, from an initial average score of 54 to 78 at the end of the activity. Most participants (80%) were able to create and manage business accounts on social media, while 70% of them began uploading promotional content with attractive designs using the Canva and CapCut apps. Furthermore, 60% of participants reported increased customer interaction through direct messages and comments on their social media. In terms of practical skills, participants were able to apply basic digital marketing techniques, such as setting up a business profile, using the Instagram Insights feature to monitor content performance, and implementing a consistent posting schedule. Some participants also began implementing collaborative strategies, such as cross-promotion between MSMEs in the same village. This demonstrates that the training not only results in individual improvement but also strengthens socio-economic networks at the community level.

Qualitatively, there was a change in participants' attitudes toward the importance of digital transformation. Before the training, most MSMEs felt awkward and unsure about using social media due to limited technical skills. However, after the mentoring, they demonstrated high enthusiasm for continuing to learn and develop their businesses online. Several participants even stated that after the training, they received new orders from customers outside the Mojokerto area through digital platforms. In addition to enhancing individual skills, this activity also resulted in the formation of the Sumberrejo Village Digital MSME community. This community serves as a forum for business owners to share experiences, exchange content ideas, and collaborate on local product promotions. The village government also provides support by providing a digital space in the village hall as a center for advanced training and free internet access for MSMEs. The

existence of this community is a strategic step towards ensuring the sustainability of community service outcomes.

This discussion of the results aligns with Bella and Rhiswandi [26] research, which states that increasing digital literacy significantly expands the competitiveness of MSMEs in local and global markets. Digital literacy encompasses not only technical skills but also strategic thinking in managing a business's digital identity. In the context of this community service, participants demonstrated the ability to integrate local values with modern marketing strategies, thus creating an authentic yet relevant product image for the digital market. In terms of approach, the application of andragogy and learning-by-doing methods proved effective. Participants who actively engaged in hands-on practice tended to grasp the functions of social media more quickly than those who only received theoretical explanations. These results reinforce Knowles' (1980) view of the importance of experiential engagement in adult learning, where the learning process becomes more meaningful when directly linked to everyday life contexts.

This activity also demonstrated that the success of community service is heavily influenced by a participatory and collaborative approach [27]. The involvement of village governments, universities, and student mentors is crucial in creating a supportive learning environment [28]. This cross-stakeholder collaboration ensures that the activity doesn't stop at the training stage but continues into the mentoring phase and the development of a sustainable digital ecosystem for local MSMEs [29]. Overall, the results of this activity confirm that improving digital literacy can be a catalyst for strengthening village economies in the era of digital transformation [30]. By effectively utilizing social media, MSMEs can not only expand their market reach but also build stronger relationships with consumers. This activity serves as a relevant model of community service that can be replicated in other rural areas with similar characteristics, to accelerate equitable digital literacy and community-based economic growth.

4. Conclusion

Social media-based digital literacy training has proven effective in improving the ability of rural MSMEs to adapt to digital technology developments. Through this activity, participants not only gain practical knowledge about using social media as a marketing tool but also develop a positive attitude toward leveraging technology in business development. Such community service activities need to be implemented sustainably with the support of local governments, universities, and private partners to ensure equitable digital transformation in the MSME sector. Continued mentoring and the formation of village MSME digital communities are also strategic steps to ensure the sustainability of training outcomes.

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6. Declaration

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