

Enhancing Local MSME Competitiveness through Participatory Community Service and Digital Transformation Initiatives

Ahmad Hafiyyan Shibghatalloh^{1*}, Arisanti Ayu Wardhani², Achmad Solechan³, Hasan Aminda Syafrudin⁴, Albertus Setyo Sumargo⁵, Lubertus Wahyu Priyo Dwiantoro⁶, Nana Noviada Kwartawaty⁷,

¹Universitas Telogorejo Semarang; Semarang; Indonesia; ahmad_hafiyyan@universitastelogorejo.ac.id

²Universitas Telogorejo Semarang; Semarang; Indonesia; arisanti@universitastelogorejo.ac.id

³Universitas Telogorejo Semarang; Semarang; Indonesia; achmad_solechan@universitastelogorejo.ac.id

⁴Universitas Telogorejo Semarang; Semarang; Indonesia; hasan@universitastelogorejo.ac.id

⁵Universitas Telogorejo Semarang; Semarang; Indonesia; setyo@universitastelogorejo.ac.id

⁶Universitas Telogorejo Semarang; Semarang; Indonesia; lubertus@universitastelogorejo.ac.id

⁷Universitas Telogorejo Semarang; Semarang; Indonesia; nana_noviada@universitastelogorejo.ac.id

*Correspondence: ahmad_hafiyyan@universitastelogorejo.ac.id

Abstract: *Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in supporting local economic development and employment creation. However, many local MSMEs continue to face structural challenges related to limited managerial capacity, low digital literacy, and weak market competitiveness. This community service program aims to enhance the competitiveness of local MSMEs through participatory empowerment and digital transformation initiatives. The program was implemented using a participatory approach that actively involved MSME actors in all stages of the activities, including needs assessment, training, implementation, and evaluation. The intervention focused on strengthening basic business management skills, improving digital marketing capabilities, and facilitating the adoption of simple digital tools to expand market reach. The methods employed included socialization sessions, hands-on training, practical application of digital marketing platforms, and continuous mentoring. The results indicate a significant improvement in MSME participants' understanding of business management practices, increased utilization of digital marketing channels, and enhanced awareness of the importance of digital transformation for business sustainability. Overall, the program demonstrates that participatory community service combined with digital transformation initiatives can effectively improve MSME competitiveness and adaptability in the local context. This approach offers a practical model for sustainable MSME empowerment that can be replicated in similar community settings.*

Keywords : *MSMEs, competitiveness, community service, digital transformation, participatory approach*

Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a pivotal role in strengthening local economies, particularly in developing countries such as Indonesia. MSMEs contribute significantly to employment creation, income distribution, and poverty alleviation, while also acting as a buffer during periods of economic uncertainty. In Indonesia, MSMEs account for more than 60% of the national Gross Domestic Product (GDP) and absorb approximately 97% of the workforce. Despite

their substantial contribution, many MSMEs continue to face structural and managerial challenges that limit their competitiveness and long-term sustainability (Anwar et al., 2023).

Previous community service and empowerment studies consistently highlight that MSMEs often struggle with limited managerial capacity (Susanto et al., 2020), weak financial literacy, low adoption of digital technology (Anwar et al., 2023), and insufficient product standardization. Community-based interventions have demonstrated that capacity-building programs focusing on managerial skills, marketing innovation, and technology adoption can significantly enhance MSME performance and resilience (Atmojo et al., 2023; Setyorini et al., 2022). Several community service journals emphasize that strengthening MSMEs requires an integrated approach rather than fragmented training activities, as sustainable competitiveness depends on the synergy between internal capabilities and external market adaptation (Mavilinda et al., 2022).

In urban and peri-urban areas such as Semarang City, MSMEs are predominantly home-based and informal in nature. Kelurahan Kedungmundu represents a typical urban neighborhood where MSMEs operate in sectors such as home-based culinary production, small-scale retail, services, and creative products. Although these enterprises show strong entrepreneurial motivation, many remain stagnant in terms of business growth. Empirical findings from community engagement research reveal that MSMEs in similar contexts often rely on traditional business practices, lack structured financial records, and depend heavily on local markets with limited outreach.

One of the most pressing issues affecting MSME competitiveness is the low level of managerial and financial management skills (Khafidzoh et al., 2024). Numerous community service studies report that MSME owners frequently mix personal and business finances, making it difficult to assess business performance and access formal financing. Community empowerment programs focusing on basic bookkeeping and business planning have proven effective in improving financial discipline and decision-making among MSME actors.

In addition to managerial constraints, limited digital literacy has become a critical barrier in the era of digital transformation (Bouwman et al., 2019; Chatterjee et al., 2023; Ferreira et al., 2023). Digital marketing, social media utilization, and e-commerce platforms offer significant opportunities for MSMEs to expand market reach and enhance brand visibility. However, community service literature indicates that many MSMEs lack the knowledge and confidence to adopt digital tools effectively. Training and mentoring initiatives in digital marketing have been shown to increase online presence, customer engagement, and sales performance, particularly when combined with hands-on assistance.

Product standardization and legal compliance represent another crucial dimension of MSME competitiveness. Studies in community service journals underline

that product quality consistency, attractive packaging, and compliance with basic legal standards such as business permits and food safety certification significantly influence consumer trust (Remedi-Rumi & Arzuaga-Williams, 2024; Silapacharanan et al., 2022). MSMEs that fail to meet minimum standards often face difficulties entering modern markets and forming partnerships. Community-based assistance in packaging design, labeling, and standard compliance has been widely recognized as an effective strategy to enhance product value and market acceptance.

Furthermore, integrated community service programs emphasize the importance of participatory and context-based approaches. Rather than imposing standardized solutions, successful MSME empowerment initiatives are those that involve active participation from MSME actors, local stakeholders, and facilitators. Participatory approaches ensure that interventions are aligned with the actual needs and capabilities of MSMEs, thereby increasing the likelihood of adoption and sustainability (Harto et al., 2019; Naimah et al., 2020; Oktaviana et al., 2022; Subardin et al., 2022).

Based on these considerations, this community service program was designed to enhance the competitiveness of MSMEs in Kelurahan Kedungmundu, Semarang City, through an integrated empowerment model. The program focuses on strengthening managerial capacity, improving digital marketing skills, and increasing awareness of product standardization and business legality. By combining training, practical application, and continuous mentoring, this program aims to create sustainable improvements in MSME performance and competitiveness.

This article contributes to the body of community service literature by presenting an applied empowerment model tailored to urban MSMEs. It also provides empirical insights into how integrated capacity-building interventions can address multiple structural constraints simultaneously. The findings are expected to serve as a reference for policymakers, academics, and practitioners involved in MSME development and community empowerment programs.

Method

This community service program was designed using a participatory and action-oriented approach to enhance the competitiveness of local Micro, Small, and Medium Enterprises (MSMEs) through digital transformation initiatives. The program was implemented in Kedungmundu, an urban area in Semarang City, involving MSME actors from various business sectors, including food processing, retail, services, and home-based creative industries. The participatory approach was adopted to ensure that the intervention addressed the actual needs and capacities of MSME participants while fostering a sense of ownership and sustainability. The program began with an initial coordination and socialization phase involving local stakeholders and MSME representatives to introduce the objectives, scope, and expected outcomes of the

community service activities. During this phase, a needs assessment was conducted through informal discussions and observations to identify key challenges related to business management, digital literacy, and market access. Based on the assessment results, a structured intervention plan was developed focusing on three main components: managerial capacity building, digital marketing enhancement, and the adoption of simple digital tools. The training phase consisted of interactive sessions covering basic business management practices such as simple bookkeeping, cost calculation, pricing strategies, and basic business planning, aimed at improving MSMEs' ability to manage their operations more systematically. In parallel, digital marketing training emphasized the practical use of social media platforms, content creation, product presentation, and basic marketplace utilization to support market expansion. Following the training sessions, the program proceeded to a practical implementation stage, where MSME participants were guided to directly apply the knowledge and skills acquired. Participants were assisted in creating or optimizing business social media accounts, developing promotional content, and implementing simple financial recording templates tailored to their business scale. Continuous mentoring was then conducted to support participants during the application process, address emerging challenges, and reinforce learning outcomes. Mentoring activities were carried out through regular follow-up meetings, on-site visits, and online communication to ensure flexibility and accessibility. Evaluation of the program was conducted qualitatively by observing changes in participants' business practices, level of engagement, and adoption of digital tools. Feedback from MSME participants was also collected to assess perceived benefits and identify areas for improvement. To ensure sustainability, the program emphasized knowledge transfer and encouraged MSME actors to independently continue the implementation of improved management practices and digital marketing strategies. Collaboration with local stakeholders was strengthened to support long-term MSME development and potential scaling of the program. Overall, this methodological framework ensured that the community service program was contextually relevant, participatory, and oriented toward sustainable improvement in MSME competitiveness. Sample of Image:

Result

This section presents the results of the community service implementation, focusing on the dynamics of the mentoring process, the technical actions undertaken, and the knowledge outcomes achieved by MSME participants. The community service program was carried out through a participatory mentoring model that emphasized active involvement of MSME actors throughout all stages of the program. The mentoring process began with initial socialization and needs identification, followed by a series of capacity-building activities related to business management and digital transformation. During the implementation phase, MSME participants actively

engaged in training sessions, hands-on practice, and follow-up mentoring, which allowed facilitators to directly observe changes in participants' knowledge, skills, and business behavior.

The mentoring activities were conducted in several forms, including face-to-face training, guided practice sessions, and continuous assistance during the application of digital tools. Technical actions focused on strengthening basic managerial skills, such as simple bookkeeping and pricing strategies, as well as improving digital marketing capabilities through social media utilization and basic content creation. Participants were encouraged to directly apply the materials delivered during training to their respective businesses, enabling facilitators to monitor progress and provide immediate feedback. This approach helped reduce barriers to technology adoption and increased participants' confidence in using digital platforms for business purposes.

One of the main outcomes of the program was the improvement in participants' knowledge and understanding of business management and digital marketing. Prior to the intervention, most MSME actors had limited knowledge of structured financial recording, digital promotion strategies, and the strategic role of digital transformation in enhancing competitiveness. After the mentoring process, participants demonstrated improved awareness and practical understanding of these aspects, as reflected in their ability to implement simple bookkeeping practices, manage digital business accounts, and produce basic promotional content.



Figure. Community services

The program began with an opening and socialization session, where the academic team introduced the objectives and scope of the community service through the official banner on MSME competitiveness, symbolizing institutional commitment and the initiation of collaborative engagement with the local community. This initial session created a shared understanding and encouraged active participation from MSME actors. The mentoring process was further strengthened through collective activities involving both facilitators and community representatives, as shown by the joint display of the program banner, which represented partnership, mutual support, and shared responsibility in achieving program goals. The core activities took place in a communal setting, where MSME participants gathered to attend training and mentoring sessions focused on business management and digital transformation strategies. The high level of attendance and engagement observed during these sessions indicated strong interest and relevance of the program to local business needs. Participants actively interacted with facilitators, asked questions, and shared their business experiences, fostering a dynamic learning environment. The broader community involvement, illustrated by the large number of participants attending the sessions under a community tent, reflects the inclusive nature of the program and its ability to reach diverse MSME actors from various sectors. Overall, the documented activities demonstrate that the community service program successfully created an interactive, collaborative, and practice-oriented learning environment that supported knowledge exchange, peer learning, and increased awareness of strategies to enhance MSME competitiveness in the local context.

The knowledge change outcome was measured through a simple assessment comparing participants' self-reported knowledge levels before and after the program. The results indicate a consistent increase in knowledge across all assessed items. Table 1 presents an overview of the knowledge change outcome scores.

Table 1. Knowledge Change Outcome Score

Items	Prior Knowledge Score	Knowledge Score After
Basic business management	Low	Moderate–High
Simple bookkeeping practices	Low	Moderate
Digital marketing understanding	Low	Moderate–High

Items	Prior Knowledge Score	Knowledge Score After
Use of social media for business	Low	High
Awareness of digital competitiveness	Moderate	High

Source: Community Service Program Data (2025)

Overall, the results show that the participatory mentoring process and practical-oriented activities contributed positively to the emergence of new knowledge and skills among MSME participants. The program not only enhanced technical understanding but also encouraged behavioral changes toward more structured and digitally oriented business practices.

Discussion

The findings of this community service program highlight the effectiveness of participatory community service and digital transformation initiatives in enhancing local MSME competitiveness. The observed improvement in knowledge and practical skills supports previous community service studies that emphasize the importance of participatory approaches in MSME empowerment. Active involvement of participants throughout the mentoring process enabled knowledge to be transferred more effectively, as MSME actors were not merely passive recipients but active learners who applied new insights directly to their businesses.

The increase in managerial and digital marketing knowledge demonstrates that practical and context-based interventions are essential in addressing structural challenges faced by MSMEs. The results confirm that limited managerial capacity and low digital literacy, which are commonly reported barriers in MSME development, can be mitigated through continuous mentoring and hands-on assistance. The improvement in simple bookkeeping practices indicates that even basic financial management training can lead to meaningful changes in business behavior, particularly when delivered in an accessible and practice-oriented manner.

Furthermore, the enhanced understanding and utilization of digital marketing tools reflect the growing relevance of digital transformation in improving MSME competitiveness. The findings align with theoretical perspectives on digital empowerment, which argue that digital tools can expand market access, increase visibility, and strengthen competitiveness when MSME actors possess adequate digital literacy. The participatory mentoring model allowed participants to gradually adapt to digital platforms, reducing resistance to change and increasing confidence in technology adoption.

From a community service perspective, the emergence of new knowledge

among MSME participants can be viewed as an important outcome of the service process. Knowledge generation in this context is not limited to technical skills but also includes increased awareness of strategic business development and competitiveness. This supports the notion that community service programs should aim not only to solve immediate problems but also to foster long-term learning and adaptive capacity within the community.

The results also suggest that integrating managerial capacity building with digital transformation initiatives creates a synergistic effect on MSME competitiveness. Rather than addressing challenges in isolation, the combined approach enabled MSME actors to understand how managerial discipline and digital tools complement each other in supporting sustainable business growth. This integrated model strengthens the theoretical argument that MSME empowerment requires holistic interventions that address both internal capabilities and external market dynamics.

In conclusion, the discussion reinforces that participatory community service, supported by continuous mentoring and practical digital initiatives, is an effective strategy for enhancing MSME competitiveness. The findings contribute to the community service literature by demonstrating how integrated and participatory approaches can generate sustainable knowledge outcomes and behavioral change among MSME actors, particularly in urban local contexts.

Conclusion

This community service program demonstrates that participatory approaches combined with digital transformation initiatives can effectively enhance the competitiveness of local Micro, Small, and Medium Enterprises (MSMEs). The implementation of the program in Kedungmundu, Semarang, highlights the importance of engaging MSME actors as active participants throughout the entire process, from needs assessment to mentoring and evaluation. By emphasizing collaboration and practical engagement, the program successfully addressed key challenges faced by MSMEs, particularly in relation to limited managerial capacity and low digital literacy. The results indicate that the integrated mentoring model contributed to meaningful improvements in MSME knowledge, awareness, and readiness to adopt more structured business practices. MSME participants showed increased understanding of basic business management, including simple bookkeeping and pricing strategies, as well as enhanced awareness of the strategic role of digital marketing in expanding market reach. These improvements suggest that even relatively simple and context-based interventions can generate significant positive changes when delivered through participatory and practice-oriented methods. Furthermore, the program underscores the relevance of digital transformation as a key driver of MSME competitiveness in the local economic context. The adoption of digital tools, particularly social media platforms for business promotion, enabled MSME actors to recognize new opportunities for market expansion and customer

engagement. This finding reinforces the argument that digital literacy should be integrated into community service programs aimed at economic empowerment, especially in urban and semi-urban areas. In conclusion, the community service initiative provides a practical and replicable model for enhancing MSME competitiveness through participatory engagement and digital empowerment. The approach not only supports short-term knowledge transfer but also fosters long-term adaptive capacity and sustainability among MSMEs. Future community service programs are encouraged to build upon this model by incorporating continuous mentoring, stronger stakeholder collaboration, and quantitative performance indicators to further strengthen the impact and scalability of MSME empowerment initiatives.

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