

Community Service and MSME Strengthening Based on Green Economy, Business Digitalization, and Financial Literacy in Supporting Sustainable Poverty Alleviation

Sutrisno^{1*}, Hizbul Khootimah Az zaakiyyah², Desi Kristanti³

¹*Universitas PGRI Semarang, Indonesia, sutrisno@upgris.ac.id*

²*Universitas Mandiri, Indonesia*

³*Universitas Kadiri, Indonesia*

Abstract

This study aims to analyze and enrich the literature related to community service in strengthening Micro, Small, and Medium Enterprises (MSMEs) based on the green economy, business digitalization, and financial literacy in supporting sustainable poverty alleviation. The study employs a qualitative approach using a literature review method analyzed descriptively. Data were collected from Google Scholar and various credible websites within the period 1977–2026. Out of 50 identified articles, a rigorous selection process based on relevance, quality, and scientific contribution resulted in 40 articles for further analysis. The findings indicate that community service plays a strategic role in enhancing MSME capacity through an integrated approach combining digitalization, financial literacy, and green economy practices. The integration of these three aspects has been proven to improve business efficiency, the quality of financial decision-making, and environmental sustainability. However, several challenges remain, including low digital literacy, limited access to financing, and insufficient continuous mentoring. Therefore, an integrative, contextual, and sustainable community service model supported by multi-stakeholder collaboration is needed. This study is expected to provide both theoretical and practical contributions to the development of more effective and sustainable MSME empowerment programs.

Keywords: Community Service, MSMEs, Green Economy, Business Digitalization, Financial Literacy, Sustainable Poverty Alleviation

Pengabdian Masyarakat dan Penguatan UMKM Berbasis Green Economy serta Digitalisasi Usaha dan Literasi Keuangan dalam Mendukung Pengentasan Kemiskinan Berkelanjutan

Abstrak

Penelitian ini bertujuan untuk menganalisis dan memperkaya referensi terkait pengabdian masyarakat dalam penguatan UMKM berbasis green economy, digitalisasi usaha, dan literasi keuangan dalam mendukung pengentasan kemiskinan berkelanjutan. Penelitian menggunakan pendekatan kualitatif dengan metode tinjauan pustaka yang dianalisis secara deskriptif. Data dikumpulkan dari Google Scholar dan berbagai website kredibel yang relevan dalam rentang tahun 1977–2026. Dari total 50 artikel yang diidentifikasi, dilakukan seleksi ketat berdasarkan relevansi, kualitas, dan kontribusi ilmiah sehingga diperoleh 40 artikel yang dianalisis lebih lanjut. Hasil penelitian menunjukkan bahwa pengabdian masyarakat memiliki peran strategis dalam meningkatkan kapasitas UMKM melalui pendekatan terintegrasi yang menggabungkan aspek digitalisasi, literasi keuangan, dan praktik green economy. Integrasi ketiga aspek tersebut terbukti mampu meningkatkan efisiensi usaha, kualitas pengambilan keputusan finansial, serta keberlanjutan lingkungan. Namun demikian, masih ditemukan berbagai kendala, seperti rendahnya literasi digital, keterbatasan akses pembiayaan, serta kurangnya pendampingan berkelanjutan. Oleh karena itu, diperlukan model pengabdian masyarakat yang bersifat integratif, kontekstual, dan berkelanjutan dengan dukungan kolaborasi multipihak.

Kata kunci: Pengabdian Masyarakat, UMKM, Green Economy, Digitalisasi Usaha, Literasi Keuangan, Pengentasan Kemiskinan Berkelanjutan

INTRODUCTION

Community service is one of the main pillars of the tridharma of higher education, playing a strategic role in bridging the gap between academic theory and practical implementation. In the context of economic development, community service activities significantly contribute to empowering Micro, Small, and Medium Enterprises (MSMEs) as the backbone of the national economy. MSMEs not only create employment opportunities but also serve as an important instrument for income distribution. Strengthening MSMEs through innovative and sustainable approaches has become an urgent necessity, especially in facing increasingly complex and competitive global economic dynamics.

Along with the growing global awareness of environmental issues, the concept of the green economy has emerged as a relevant approach to MSME development. The green economy emphasizes resource efficiency, carbon emission reduction, and environmentally friendly business practices without compromising economic growth. In the MSME context, these principles can be implemented through the use of sustainable raw materials, proper waste management, and energy efficiency in production processes. Strengthening MSMEs based on the green economy contributes to long-term environmental sustainability and community welfare (Hossain et al., 2025).

On the other hand, the rapid development of digital technology has significantly transformed business patterns and consumer behavior. Business digitalization has become a key strategy in improving market access, operational efficiency, and product innovation for MSMEs. The use of digital platforms such as e-commerce, social media, and electronic payment systems enables MSMEs to reach broader markets at relatively low costs (Kilay et al., 2022). However, many MSME actors still face challenges in adopting digital technologies, including limited skills, infrastructure, and digital literacy.

In addition to digitalization, financial literacy is also a crucial factor in supporting the sustainability and growth of MSMEs. Financial literacy includes understanding financial management, business planning, access to financial institutions, and sound financial decision-making. Low levels of financial literacy often cause MSME actors to struggle with cash flow management, pricing strategies, and access to formal financing (Molosiwa & Holland, 2025). Enhancing financial literacy through education and mentoring programs is therefore a strategic step in strengthening MSME capacity comprehensively.

The interconnection between the green economy, business digitalization, and financial literacy reflects a multidimensional approach to MSME strengthening. These three aspects complement each other in creating a competitive and sustainable business ecosystem. Digitalization enables efficiency and market expansion (Zhang et al., 2024), financial literacy ensures sound business management (Hosen et al., 2025), while the green economy guarantees environmental sustainability (Imtiaz et al., 2025). Integrating these aspects within community service activities is expected to generate more significant impacts compared to partial approaches.

In the context of poverty alleviation, strengthening MSMEs plays a highly strategic role as it directly increases community income. Poverty is often caused by low human

resource capacity, limited information, and restricted access to technology and finance (Affandi et al., 2025). An approach that integrates community service with MSME strengthening based on the green economy, digitalization, and financial literacy provides a comprehensive solution to address the root causes of poverty sustainably.

Various empirical studies have shown that MSME empowerment programs through training and mentoring significantly improve business performance. Research by Higuchi et al. (2019) found that management training for small business actors in developing countries improves business practices, although its impact on profitability varies. Meanwhile, Tripalupi & Yulianti (2026) emphasize that a combination of training, mentoring, and access to financing yields more effective results than single interventions in improving MSME productivity.

In terms of digitalization, Trinugroho et al. (2022) demonstrate that digital technology adoption contributes to operational efficiency and market expansion. In Indonesia, Khristiana et al. (2024) found that MSMEs connected to digital platforms experienced a revenue increase of 20–30% compared to those that were not digitized. This reinforces the importance of digitalization as a strategy to enhance MSME competitiveness.

Furthermore, financial literacy has been proven to be a key determinant of MSME success. Lusardi & Mitchell (2011) show that higher levels of financial literacy are positively associated with better financial management and business decision-making. At the national level, Sarfiah et al. (2025) reveal that the financial literacy index among MSME actors remains relatively low, affecting access to formal financing and long-term business planning.

Meanwhile, the green economy approach in MSMEs has begun to gain attention in recent studies. Abdul Basit et al. (2024) highlight that sustainable business practices not only reduce environmental impact but also improve cost efficiency and business reputation. Similarly, Dahri et al. (2025) find that green innovation in small enterprises can become a source of competitive advantage when supported by appropriate policies and education.

However, most of these studies remain partial, focusing only on one or two aspects such as training, digitalization, or financial literacy separately. Research integrating all three aspects simultaneously within a green economy framework in the context of community service is still limited. Therefore, there is an important research gap to explore how the synergy between digitalization, financial literacy, and environmental sustainability can collectively strengthen MSMEs and contribute to sustainable poverty alleviation.

Based on the above discussion, this study is important to analyze and examine the role of community service in strengthening MSMEs based on the green economy, business digitalization, and financial literacy in supporting sustainable poverty alleviation. This research is expected to provide theoretical contributions to MSME empowerment studies and practical contributions for stakeholders in designing more effective and sustainable programs. Ultimately, the findings are expected to serve as a reference in improving community welfare through adaptive, inclusive, and sustainable MSME development.

Community Service

Community service is one of the main pillars of the tridharma of higher education, focusing on the application of knowledge, technology, and research outcomes to provide direct benefits to society (Lutfiyah, 2025). This activity is not merely a transfer of knowledge but also involves a participatory empowerment process, where communities are actively engaged in identifying problems and formulating solutions. In the context of economic development, community service acts as a catalyst for social change by enhancing the capacity of individuals and groups, particularly in strengthening community-based economic independence.

MSMEs

MSMEs are productive business units owned by individuals or groups with small to medium scales, playing a strategic role in the economy, particularly in job creation and income distribution (Sutrisno et al., 2024a, 2024b, 2025). MSMEs are often referred to as the backbone of the economy due to their significant contribution to Gross Domestic Product (GDP) and employment absorption. However, MSMEs also face various challenges, including limited capital, low access to technology, and weak business management, thereby requiring support through sustainable empowerment programs.

Green Economy

The green economy is an economic development concept that emphasizes the balance between economic growth, environmental sustainability, and social welfare (Telukdarie et al., 2024). This approach promotes efficient resource utilization, reduction of carbon emissions, and environmentally friendly business practices. In the MSME context, the green economy can be implemented through the use of sustainable raw materials, effective waste management, and environmentally low-impact product innovation. It enhances business competitiveness in markets increasingly concerned with sustainability issues.

Business Digitalization

Business digitalization refers to the use of digital technologies across various aspects of business activities, including production, marketing, and financial management (Sutrisno et al., 2023; Titin et al., 2024). Through digitalization, businesses can improve operational efficiency, expand market reach, and create more competitive products and services. Examples include the use of e-commerce platforms, social media marketing, and digital payment systems. However, the success of digitalization largely depends on digital literacy levels and infrastructure readiness, necessitating continuous training and mentoring support.

Financial Literacy

Financial literacy is the ability of individuals to understand, manage, and make effective and sound financial decisions (Lusardi & Mitchell, 2014). It includes knowledge of cash flow management, financial planning, investment, and the use of formal financial services. In the MSME context, financial literacy is crucial to ensure business sustainability, as

entrepreneurs must be able to separate personal and business finances and make appropriate financial decisions. Low levels of financial literacy often hinder business development, particularly in accessing financing and managing risks.

Sustainable Poverty Alleviation

Sustainable poverty alleviation refers to systematic efforts to reduce poverty through a long-term approach that focuses not only on increasing income but also on improving overall quality of life (Nzasabayezu et al., 2024). This approach encompasses economic, social, and environmental dimensions to create inclusive and sustainable welfare. In the MSME context, poverty alleviation can be achieved through community economic empowerment, capacity building, and improved access to resources and economic opportunities. Sustainable poverty alleviation addresses the structural roots of poverty.

METHOD

This study employs a qualitative approach using a literature review method aimed at enriching references related to community service, particularly in the context of strengthening MSMEs based on the green economy, business digitalization, and financial literacy. This objective is essential given the limited number of comprehensive studies integrating these three aspects within a community service framework. Therefore, this research seeks to expand the body of literature while providing a stronger conceptual foundation for developing relevant and sustainable community service programs.

The data sources in this study were obtained from various scientific articles accessed through academic platforms such as Google Scholar, as well as credible websites, including government institutions, international organizations, and research institutions with authority in the fields of economics, MSMEs, and sustainable development. The inclusion criteria included articles published between 1977 and 2026, relevance to the research topic, and discussions related to community service, MSME empowerment, green economy, business digitalization, and financial literacy. Articles that were not directly related to the research focus or did not meet adequate academic standards were excluded from the selection process.

The data collection process was conducted through systematic stages of identification, screening, and selection of literature. Initially, 50 potentially relevant articles were identified. Subsequently, a rigorous selection was carried out based on thematic relevance, methodological quality, and contribution to the research objectives. As a result, 40 articles were deemed the most representative and suitable for further analysis in this study.

The data analysis technique used was descriptive qualitative analysis, involving the examination, categorization, and interpretation of findings from the selected literature. The analysis was conducted by identifying patterns, relationships, and research gaps related to community service and MSME strengthening. Through this approach, the study is expected to provide a comprehensive overview of the development of the field, while strengthening its scientific contribution in enriching references on community service as a basis for formulating more effective and sustainable MSME empowerment strategies.

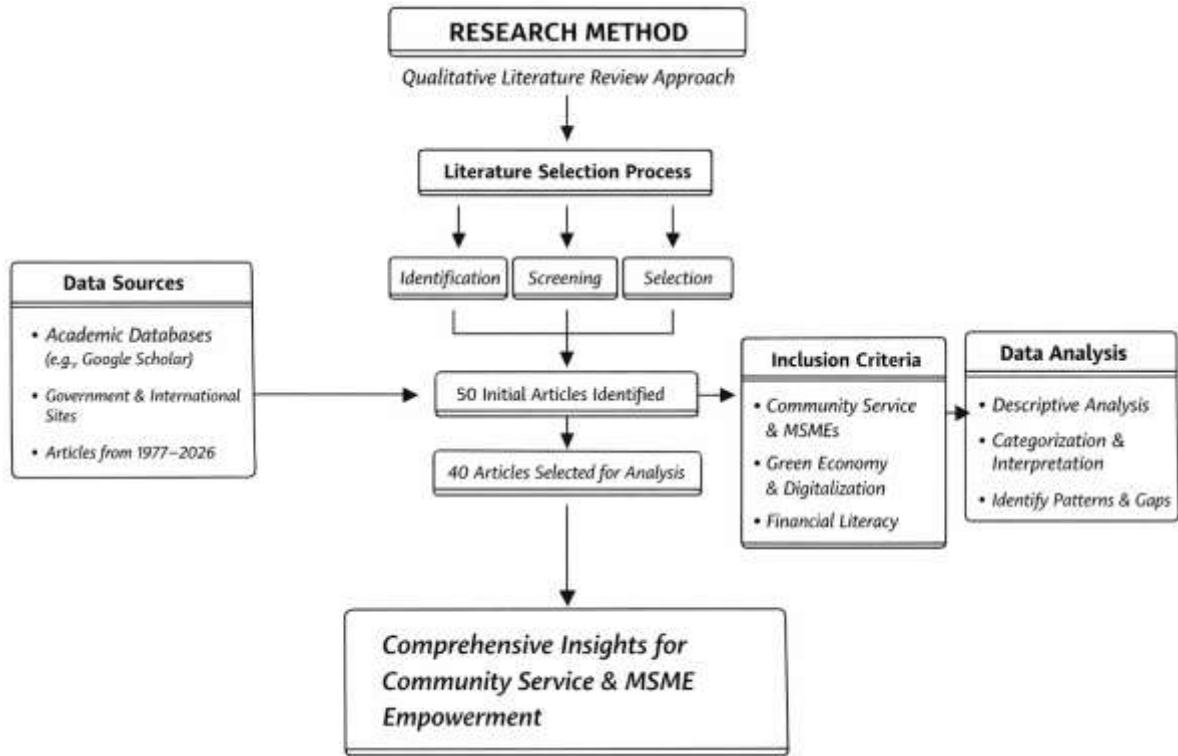


Figure 1. Research Methodology Flowchart

FINDING AND DISCUSSION

This discussion is grounded in the understanding that community service is no longer merely a one-way knowledge transfer activity but has evolved into a strategic instrument for participatory and transformative community-based economic empowerment. This transformation reflects a paradigm shift from a top-down approach to a bottom-up approach, where communities become active subjects in the economic development process. In this context, strengthening MSMEs becomes a primary focus due to their significant role in employment generation, income enhancement, and the reduction of both horizontal and vertical economic inequalities. Furthermore, the effectiveness of community service is closely linked to its ability to simultaneously integrate economic, social, and environmental dimensions, thereby creating sustainable value. Therefore, this study conceptually positions community service as a catalyst for change that drives MSME transformation toward more adaptive, inclusive, and sustainable business models.

From a theoretical perspective, this study can be explained through the lens of Social Learning Theory proposed by Bandura (1977), which emphasizes that individual learning occurs not only through direct experience but also through observation, imitation, and interaction within a social environment. In the context of community service, MSME actors acquire new knowledge and skills through collective learning mechanisms such as training, mentoring, group discussions, and hands-on practice. This process reinforces the concepts of learning by doing and learning by interacting, which have been empirically shown to enhance the adaptive capacity of entrepreneurs in dynamic business environments. Moreover, social learning fosters a more innovative, resilient, and open

entrepreneurial mindset toward the adoption of new technologies and business practices. The success of community service programs largely depends on the quality of social interactions, the intensity of mentoring, and the ability to create a collaborative and sustainable learning ecosystem.

In addition, the Resource-Based View (RBV) introduced by Barney (1991) provides a strong conceptual foundation for understanding the importance of strengthening MSMEs' internal capacities as a source of sustainable competitive advantage. RBV highlights that business success is not solely determined by external factors such as market conditions but rather by the ability to manage valuable, rare, inimitable, and non-substitutable (VRIN) resources. In the MSME context, these resources include human capital quality, financial literacy, digital capabilities, and knowledge of sustainable business practices. Community service acts as a strategic intervention to enhance these internal capabilities through knowledge transfer, skill development, and facilitated access to technology and information. Thus, community service programs function as long-term capacity-building mechanisms that enhance MSME competitiveness in an increasingly complex global environment.

From a sustainable development perspective, the concept of the green economy serves as both a normative and operational foundation for guiding MSME development toward environmental sustainability. The green economy emphasizes efficient resource utilization, reduction of environmental impacts, and the creation of economic value aligned with sustainability principles (Khan et al., 2025). In practice, MSMEs can implement this concept through energy-efficient production processes, waste management based on the reduce–reuse–recycle (3R) principle, and the use of environmentally friendly raw materials. Community service plays a strategic role in translating green economy values into practical applications through contextual education, training, and mentoring. MSMEs are encouraged to develop business models that are resilient, socially and environmentally responsible, and aligned with the Sustainable Development Goals (SDGs).

Previous studies indicate that integrated MSME empowerment programs are significantly more effective than partial approaches focusing on a single aspect. Surya et al. (2021) found that a combination of managerial training, access to financing, and continuous mentoring significantly improves MSME productivity and resilience, particularly in times of economic uncertainty. This finding aligns with Lusardi and Mitchell (2014), who emphasize the critical role of financial literacy in enhancing financial decision-making, including cash flow management, investment, and risk mitigation. Conceptually, this integration reflects a systemic approach to MSME empowerment, where various elements interact and reinforce each other. Community service adopting an integrative approach builds stronger institutional and behavioral foundations for sustainable economic practices.

In the context of digitalization, research by Ausat et al. (2022) highlights that digital technology adoption significantly improves operational efficiency, reduces transaction costs, and expands market access for MSMEs. Digitalization enables entrepreneurs to

leverage e-commerce platforms, social media, and digital payment systems to enhance competitiveness in a knowledge-based economy. However, the adoption process remains uneven due to structural constraints such as low digital literacy, limited technological infrastructure, and resistance to change. From the perspective of innovation diffusion theory, these barriers indicate a gap between early adopters and lagging groups (Rogers et al., 2019). Community service must therefore act as a change agent by providing practical digital training, intensive mentoring, and context-based approaches to ensure inclusive and sustainable digital transformation.

The first case study can be observed in Indonesia's MSME digitalization program initiated by the Ministry of Cooperatives and SMEs through the MSMEs Go Digital movement (2026). This program has empirically succeeded in integrating thousands of MSMEs into the digital ecosystem, resulting in increased revenue, improved distribution efficiency, and expanded market reach at both national and global levels. From a digital economy perspective, this initiative demonstrates the importance of integrating technology and entrepreneurship to create added value (Camps et al., 2026). However, challenges remain, particularly the digital skills gap in rural and underdeveloped regions, highlighting the need for long-term investment in human capital development.

The second case study relates to the implementation of green economy practices among handicraft MSMEs in Bali, where environmentally friendly production methods, sustainable raw materials, and community-based waste management have been adopted (Wiguna, 2025). This initiative strengthens business positioning as socially and environmentally responsible entities. From a sustainability perspective, this reflects the integration of the triple bottom line: profit, people, and planet (Kusmendar et al., 2025). However, a major challenge lies in the high initial costs associated with transitioning to environmentally friendly practices, which often hinder MSMEs with limited capital. Policy support, financial incentives, and institutional facilitation are therefore essential.

The third case study involves financial literacy programs implemented by the Financial Services Authority (OJK) through various educational initiatives targeting MSMEs (Hariani, 2025). These programs have proven effective in improving financial management capabilities, including bookkeeping, business planning, and access to formal financial services. From a behavioral finance perspective, increased financial literacy reduces cognitive biases and enhances rational economic decision-making (Pitthan & De Witte, 2025). However, challenges persist in ensuring consistent application of knowledge, indicating a gap between knowledge and behavior. Continuous mentoring is therefore necessary to internalize financial literacy in daily business practices.

Based on these empirical findings and case studies, several structural challenges in MSME development can be identified, including limited integration between digitalization, financial literacy, and green economy practices, insufficient human resource capacity, and weak continuous mentoring systems. These issues indicate that current empowerment approaches remain sectoral and fragmented, failing to address MSME needs comprehensively. From an economic development perspective, this reflects a lack of synergy among supporting factors (Widjajanti et al., 2020). Therefore, a more

holistic and integrative community service strategy is required, emphasizing cross-sector collaboration, needs-based approaches, and continuous monitoring and evaluation systems.

As a first solution, it is essential to develop an integrated community service model that systematically combines digital training, financial literacy, and green economy practices into a unified and interconnected program framework. This approach aligns with systems thinking, which views intervention success as dependent on the interconnections among system components (Kinnula et al., 2024). Digitalization enhances efficiency and market access, financial literacy strengthens economic decision-making, and the green economy ensures long-term sustainability. Their synergy is expected to generate a stronger multiplier effect. Program design must also be contextual and adaptive to local characteristics, such as business type, education level, and socio-economic conditions.

The second solution emphasizes strengthening continuous mentoring systems that extend beyond short-term training to include monitoring, evaluation, and ongoing learning. From a capacity-building perspective, sustained mentoring is crucial to ensure that knowledge is effectively translated into practice (Cristache et al., 2025). This mentoring should involve multi-stakeholder collaboration, including universities, government, and the private sector, reflecting a pentahelix approach. A structured and consistent mentoring system enables MSMEs to develop adaptive capacities to navigate dynamic business environments.

The third solution focuses on improving access to financing tailored to support MSME transformation toward green economy practices and digitalization. From a financial inclusion perspective, access to appropriate and affordable financing is a key driver of MSME growth (Chen et al., 2026). However, many MSMEs face barriers such as lack of collateral, low financial literacy, and high-risk perceptions from financial institutions. Innovative financing schemes, such as performance-based financing, green incentives, and digital adoption funding, are needed to support MSME transformation and foster an inclusive and sustainable financial ecosystem.

Overall, this discussion highlights the strategic role of community service in integrating economic, social, and environmental dimensions in MSME development. Through a comprehensive and needs-based approach, community service serves as a bridge between academic knowledge and practical implementation, generating more applicable and impactful solutions. Furthermore, the integration of digitalization, financial literacy, and the green economy significantly contributes to sustainable poverty alleviation. Therefore, strong cross-sector collaboration and collective commitment are essential to ensure that community service programs create systemic and lasting improvements in societal welfare.

Table 1. Key Findings and Discussion on MSME Strengthening through Community Service

No	Aspect	Key Findings	Implications
1	Role of Community Service	Evolved from one-way knowledge transfer to participatory and transformative empowerment	Acts as a catalyst for inclusive and sustainable MSME development

2	Development Paradigm	Shift from top-down to bottom-up approach	Communities become active agents in economic development
3	Theoretical Foundation (Social Learning Theory)	Learning occurs through interaction, observation, and practice	Strengthens entrepreneurial mindset, adaptability, and innovation
4	Theoretical Foundation (RBV)	Internal resources (VRIN) determine competitiveness	Emphasizes capacity building (HR, digital skills, financial literacy)
5	Green Economy	Promotes sustainable production and environmental responsibility	Enhances long-term competitiveness and aligns with SDGs
6	Integrated Empowerment Approach	Combined training, mentoring, and financing more effective than partial approaches	Creates systemic and sustainable MSME development
7	Digitalization	Improves efficiency, reduces costs, and expands market access	Requires digital literacy improvement and infrastructure support
8	Digitalization Challenges	Uneven adoption due to skills gap and resistance to change	Community service must act as a digital transformation enabler
9	Case Study – MSMEs Go Digital	Increased revenue and market reach of MSMEs	Shows importance of tech-entrepreneurship integration
10	Case Study – Green Economy (Bali)	Adoption of eco-friendly production and 3R practices	Needs policy support due to high initial costs
11	Case Study – Financial Literacy (OJK)	Improved financial management and decision-making	Requires continuous mentoring to bridge knowledge–practice gap
12	Structural Challenges	Fragmented approach, weak integration, low HR capacity	Indicates need for holistic and integrated strategies
13	Solution 1: Integrated Model	Combines digitalization, financial literacy, and green economy	Produces stronger multiplier effects
14	Solution 2: Continuous Mentoring	Ongoing training, monitoring, and evaluation	Ensures knowledge is applied in real business practices
15	Solution 3: Access to Financing	Need for inclusive and innovative financing schemes	Supports MSME transformation and sustainability
16	Overall Impact	Integration of key aspects supports poverty alleviation	Requires cross-sector collaboration and long-term commitment

CONCLUSION

This study confirms that community service plays a strategic role as an empowerment instrument in strengthening sustainable MSMEs. Through an integrated approach combining the green economy, business digitalization, and financial literacy, MSMEs are not only able to improve business performance but also contribute to sustainable poverty alleviation. The literature review findings indicate that these three aspects complement each other and strengthen both the internal and external capacities of MSMEs. Furthermore, the success of community service programs is strongly influenced by the quality of mentoring, the relevance of programs to the needs of business actors, and the sustainability of their implementation. Therefore, well-designed, comprehensive, and

needs-based community service programs have significant potential to drive inclusive and sustainable economic transformation.

From a theoretical perspective, this study contributes to enriching the literature on community service by emphasizing the importance of integrating the green economy, business digitalization, and financial literacy in MSME empowerment. It also reinforces the relevance of Social Learning Theory and the Resource-Based View in explaining the process of capacity building among MSME actors. From a practical standpoint, the findings provide important implications for universities, governments, and other stakeholders to design more structured, integrated, and sustainable community service programs. Such programs should be tailored to local characteristics and supported by continuous mentoring systems to ensure tangible impacts on community welfare.

This study has several limitations that should be acknowledged. First, it relies on a literature review method, making it highly dependent on the availability and quality of the analyzed sources. Second, the limited number of selected articles—40 out of an initial 50—may introduce selection bias and may not fully represent the diversity of empirical conditions. Third, the study does not involve direct field data, thus it is unable to capture in detail the dynamics of community service implementation across different regions with varying characteristics. Therefore, the findings are primarily conceptual and descriptive in nature.

Based on the findings and limitations, future research is recommended to adopt empirical approaches involving field data to directly examine the effectiveness of community service programs in strengthening MSMEs. Further studies are also encouraged to develop more applicable integrative models by considering local contexts and the diversity of MSME characteristics. For practitioners, particularly universities and government institutions, it is recommended to enhance the quality of community service programs through collaborative and sustainable approaches, while strengthening monitoring and evaluation systems. Finally, policy support is essential to promote the integration of the green economy, digitalization, and financial literacy within MSME empowerment programs, ensuring that poverty alleviation efforts become more effective and sustainable.

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to all parties who offered valuable guidance and support during the completion of this research.

REFERENCES

- Abdul Basit, S., Gharleghi, B., Batool, K., Hassan, S. S., Jahanshahi, A. A., & Kliem, M. E. (2024). Review of enablers and barriers of sustainable business practices in SMEs. *Journal of Economy and Technology*, 2, 79–94. <https://doi.org/10.1016/j.ject.2024.03.005>
- Affandi, Purwaningsih, Y., Hakim, L., & Mulyaningsih, T. (2025). Interplay between poverty, poverty eradication and sustainable development: A semi-systematic

- literature review. *Global Transitions*, 7, 1–20. <https://doi.org/10.1016/j.glt.2024.11.001>
- Ausat, A. M. A., Siti Astuti, E., & Wilopo. (2022). Analisis Faktor Yang Berpengaruh Pada Adopsi E-commerce Dan Dampaknya Bagi Kinerja UKM Di Kabupaten Subang. *Jurnal Teknologi Informasi Dan Ilmu Komputer (JTIK)*, 9(2), 333–346. <https://doi.org/10.25126/jtiik.202295422>
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Camps, C., Kraus, S., Thomas, A., Tiberius, V., & Jones, P. (2026). Digital Entrepreneurship: A review, research synthesis, and development of a framework. *Technology in Society*, 84, 103124. <https://doi.org/10.1016/j.techsoc.2025.103124>
- Chen, C., Pal, S., Mahalik, M. K., & Gozgor, G. (2026). The impact of financial inclusion on sustainable development: Evidence from BICS economies. *Research in International Business and Finance*, 82, 103224. <https://doi.org/10.1016/j.ribaf.2025.103224>
- Cristache, N., Croitoru, G., & Florea, N. V. (2025). The influence of knowledge management on innovation and organizational performance. *Journal of Innovation & Knowledge*, 10(5), 100793. <https://doi.org/10.1016/j.jik.2025.100793>
- Dahri, A. S., Saraih, U. N. B., Rehman, J., Salameh, A. A., & Namisango, F. (2025). Deriving green competitive advantage in the SMEs: A sustainable firm performance perspective. *Sustainable Futures*, 9, 100618. <https://doi.org/10.1016/j.sftr.2025.100618>
- Hariani, A. (2025). OJK Gencarkan Literasi Keuangan Digital kepada UMKM. *PAJAK.COM*, 1. <https://www.pajak.com/ekonomi/ojk-gencarkan-literasi-keuangan-digital-kepada-umkm/>
- Higuchi, Y., Mhede, E. P., & Sonobe, T. (2019). Short- and medium-run impacts of management training: An experiment in Tanzania. *World Development*, 114, 220–236. <https://doi.org/10.1016/j.worlddev.2018.10.002>
- Hosen, M. E., Alam Siddik, M. N., & Miah, M. F. (2025). Exploring the impact of financial literacy and financial inclusion on financial stability: An analysis using machine learning approaches. *Borsa Istanbul Review*, 100763. <https://doi.org/10.1016/j.bir.2025.11.004>
- Hossain, M. I., Jamadar, Y., Islam, M. F., Rashed, Md., & Akter, T. (2025). Environmental sustainability practices in SMEs: Insights from integrated PLS-SEM and fsQCA approaches. *Journal of Cleaner Production*, 503, 145185. <https://doi.org/10.1016/j.jclepro.2025.145185>
- Imtiaz, A., Yuanying, C., Shahzad, M. F., Raheel, A., Sabah, F., & Sarwar, R. (2025). Mapping the intellectual structure of green economy and sustainability: a bibliometric analysis of global research trends and policies. *Cogent Economics & Finance*, 13(1). <https://doi.org/10.1080/23322039.2025.2507135>

- Khan, R. Z., Razak, L. A., & Premaratne, G. (2025). Green growth and sustainability: A systematic literature review on theories, measures and future directions. *Cleaner and Responsible Consumption*, 17, 100274. <https://doi.org/10.1016/j.clrc.2025.100274>
- Khristiana, Y., Santosa, J., Utomo, A., Imron Pahlawi, L. A., & Susilowati, E. M. (2024). Strategi Digitalisasi UMKM: Pendampingan dan Implementasi di Kampung Batik Pungsari, Sragen. *JICS: Journal Of International Community Service*, 3(02), 99–109. <https://doi.org/10.62668/jics.v3i02.1372>
- Kilay, A. L., Simamora, B. H., & Putra, D. P. (2022). The Influence of E-Payment and E-Commerce Services on Supply Chain Performance: Implications of Open Innovation and Solutions for the Digitalization of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 119. <https://doi.org/10.3390/joitmc8030119>
- Kinnula, M., Durall Gazulla, E., Hirvonen, N., Malmberg, J., & Haukipuro, L. (2024). Nurturing systems thinking among young people by developing business ideas on sustainable AI. *International Journal of Child-Computer Interaction*, 40, 100656. <https://doi.org/10.1016/j.ijcci.2024.100656>
- Kusmendar, Asih, A. M. S., & Normasari, N. M. E. (2025). Exploring sustainable pathways: A systematic literature review of three pillars of sustainability applications. *Sustainable Futures*, 10, 100970. <https://doi.org/10.1016/j.sftr.2025.100970>
- Lusardi, A., & Mitchell, O. (2011). *Financial Literacy around the World: An Overview*. <https://doi.org/10.3386/w17107>
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Lutfiyah, F. (2025). Pengabdian Masyarakat sebagai Upaya Peningkatan Literasi dan Kesejahteraan. *Masyarakat Mandiri: Jurnal Pengabdian Dan Pembangunan Lokal*, 2(2), 32–43. <https://doi.org/10.62951/masyarakatmandiri.v2i2.2102>
- Molosiwa, T., & Holland, J. (2025). The impact of financial literacy on the performance of Small and Medium-sized Enterprises (SMEs): A review of literature. *International Journal of Research in Business and Social Science (2147- 4478)*, 14(3), 320–332. <https://doi.org/10.20525/ijrbs.v14i3.4157>
- Nzasabayezu, O., Jaya Prakash, S. K., & M.V, R. P. (2024). A study of poverty alleviation strategies for sustainable development: A scientometric analysis. *Heliyon*, 10(13), e33469. <https://doi.org/10.1016/j.heliyon.2024.e33469>
- Pitthan, F., & De Witte, K. (2025). How learning about behavioural biases can improve financial literacy? *International Review of Economics & Finance*, 99, 103989. <https://doi.org/10.1016/j.iref.2025.103989>
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2019). Diffusion of Innovations 1. In *An Integrated Approach to Communication Theory and Research* (pp. 415–434). Routledge. <https://doi.org/10.4324/9780203710753-35>

- Sarfiah, Wa Ode Rayyani, & Alamsjah. (2025). Pengaruh Literasi Keuangan Dan Inklusi Keuangan Terhadap Kinerja UMKM Di Bira Kabupaten Bulukumba. *Jurnal Publikasi Ekonomi Dan Akuntansi*, 5(3), 585–597.
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic Growth, Increasing Productivity of SMEs, and Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 20. <https://doi.org/10.3390/joitmc7010020>
- Sutrisno, Diawati, P., Muhamad, L. F., Permana, R. M., & Suparwata, D. O. (2024a). Innovative Strategies of SMEs in Alignment with Community Needs. *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, 1(1), 30–38. <https://doi.org/10.61100/j.tirakat.v1i1.103>
- Sutrisno, Diawati, P., Muhamad, L. F., Permana, R. M., & Suparwata, D. O. (2024b). Innovative Strategies of SMEs in Alignment with Community Needs. *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, 1(1), 30–38. <https://doi.org/10.61100/j.tirakat.v1i1.103>
- Sutrisno, S., Purnomo, S. H., & Purba, J. H. V. (2023). Optimizing Business Management Strategies in the Social Media Era: Facing New Year Challenges with Digital-Based Excellence. *Journal of Contemporary Administration and Management (ADMAN)*, 1(3), 251–257. <https://doi.org/10.61100/adman.v1i3.90>
- Sutrisno, Widodo, & Ausat, A. M. A. (2025). In-Depth Study of the Strategic Interaction between Electronic Commerce, Innovation, and Attainment of Competitive Advantage in the Context of SMEs. *International Journal of Analysis and Applications*, 23, 78. <https://doi.org/10.28924/2291-8639-23-2025-78>
- Telukdarie, A., Katsumbe, T., Mahure, H., & Murulane, K. (2024). Exploring the green economy – A systems thinking modelling approach. *Journal of Cleaner Production*, 436, 140611. <https://doi.org/10.1016/j.jclepro.2024.140611>
- Titin, Sutrisno, Mahmudah, H., Muhtarom, A., & Syamsuri. (2024). Effect of Business Digitalization and Social Media on MSME Performance with Digital Competence as a Mediating Variable. *Scientific Journal of Informatics*, 11(3), 645–660. <https://doi.org/10.15294/sji.v11i3.9942>
- Trinugroho, I., Pamungkas, P., Wiwoho, J., Damayanti, S. M., & Pramono, T. (2022). Adoption of digital technologies for micro and small business in Indonesia. *Finance Research Letters*, 45, 102156. <https://doi.org/10.1016/j.frl.2021.102156>
- Tripalupi, R. I., & Yulianti, L. (2026). The Effect of Accounting Training and Mentoring on SAK EMKM Compliance and MSME Business Performance. *Research Horizon*, 6(1), 157–168. <https://doi.org/10.54518/rh.6.1.2026.579>
- UMKM Go Digital. (2026). *Berhenti Membakar Uang di Iklan. Bangun Mesin Akuisisi Pelanggan Anda Sendiri*. UMKM Go Digital. <https://umkmgodigital.com/>
- Widjajanti, K., Nuryakin, & Sugiyanto, E. K. (2020). The Synergy between Academic Support, Government Regulation, Business Sector, and Civil Society to Enhancing Innovation Ecosystem Indonesian SMEs. *Journal of Educational and Social Research*, 10(5), 108. <https://doi.org/10.36941/jesr-2020-0092>

- Wiguna, D. K. S. (2025). BI Bali perkuat inovasi UMKM yang produknya ramah lingkungan. *ANTARA Bali*, 1. <https://bali.antaranews.com/berita/373365/bi-bali-perkuat-inovasi-umkm-yang-produknya-ramah-lingkungan>
- Zhang, Q., Wu, P., Li, R., & Chen, A. (2024). Digital transformation and economic growth Efficiency improvement in the Digital media era: Digitalization of industry or Digital industrialization? *International Review of Economics & Finance*, 92, 667–677. <https://doi.org/10.1016/j.iref.2024.02.010>