Journal of International SDGs Community Services
Volume 2 No. 02 (2026)

Strengthening Social Digital Entrepreneurship Through Integrated Digital Literacy and Digital Branding for the Sustainability of Loh-Loh Cem-Cem MSMEs in Penglipuran Tourism Village

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Abstract.
The rapid advancement of digital technology has transformed the way micro, small, and medium enterprises (MSMEs) operate, particularly in tourism destinations where market competition increasingly depends on digital visibility and business innovation. However, many community-based tourism enterprises continue to face challenges related to digital literacy, branding capability, and the effective utilization of digital platforms. This community engagement program was implemented to strengthen the digital entrepreneurial capacity of the Loh-Loh Cem-Cem MSME located in Penglipuran Tourism Village, Bali, through an integrated digital literacy and entrepreneurship approach. The program was conducted during the International Community Service (ICS) 2 activities from 29 June to 2 July 2026 using a participatory approach that combined Focus Group Discussions, workshops, hands-on training, mentoring, and continuous evaluation. The intervention focused on digital branding, social media optimization, business storytelling, visual identity development, and practical implementation of digital marketing strategies. The results demonstrated substantial improvements in participants' digital literacy, branding competence, confidence in utilizing digital platforms, and understanding of sustainable digital entrepreneurship. The MSME successfully adopted a more professional product identity, enhanced its promotional content, and expanded its readiness to access broader digital markets. Community participation throughout the implementation process contributed significantly to the sustainability of the program by encouraging local ownership and collaborative learning. The novelty of this program lies in integrating social digital entrepreneurship, digital branding, and sustainability values within a tourism-based community empowerment framework, providing a practical model that can be replicated in other community-based tourism destinations.

Keywords: *Community empowerment; Digital branding; Digital literacy; MSMEs; Social digital entrepreneurship.*

I. INTRODUCTION

Digital transformation has changed how micro, small, and medium enterprises compete, communicate with customers, and expand their markets. For tourism-based MSMEs, digital capability is especially important because business visibility increasingly depends on social media, online information, visual content, and customer engagement. Digital literacy therefore functions not only as a technical skill but also as a strategic capability that supports innovation, adaptability, and business performance (Lu et al., 2024; Raharjo et al., 2024; Valdez-Juárez et al., 2024).

Tourism MSMEs often possess strong cultural and product value but face limitations in branding, content creation, and digital marketing. Previous studies show that digital marketing can improve customer reach, business performance, and market competitiveness when supported by adequate knowledge, consistent branding, and organizational readiness (Jayawardena et al., 2024; Sharma & Sharma, 2024; Sharabati et al., 2024).

This condition was also identified in the Loh-Loh Cem-Cem MSME in Penglipuran Tourism Village, Bali. The product has strong cultural value as a traditional Balinese herbal beverage, yet its digital promotion, visual identity, and product storytelling had not been developed optimally. Marketing activities were still largely dependent on direct tourist purchases and word-of-mouth promotion.

The challenge was not limited to the use of digital platforms. The MSME also needed a clearer brand identity that could communicate authenticity, natural ingredients, Balinese culture, and local wisdom. Strong branding is important because it enables tourism MSMEs to transform local uniqueness into recognizable and competitive market value (Shi & Xiao, 2024).

Studies have also shown that digitalization, innovation, and sustainability are closely related to the performance of tourism MSMEs. Digital transformation becomes more effective when it is integrated with business identity, innovation, community participation, and sustainable practices (Purnomo & Purwandari, 2025; Zúñiga-Collazos et al., 2025).

However, many community empowerment programs still focus mainly on technical training, such as social media use, without sufficiently integrating cultural branding, sustainability storytelling, and social entrepreneurship. This creates a gap between digital skill development and the ability of local enterprises to communicate their cultural and social value.



Figure 1 Participants and community engagement team of the 2nd International



Figure 2 Community engagement team introducing the Social Digital Entrepreneurship

Community Service (ICS 2) program at Penglipuran Tourism Village, Bali.

program framework for the Loh-Loh Cem-Cem MSME.

Recent evidence further suggests that strengthening entrepreneurship in the digital era requires more than technical digital competence. Digital literacy, entrepreneurial agility, and digital entrepreneurship education jointly play a significant role in improving entrepreneurial readiness and the capacity to adapt to rapidly changing business environments (Swaramarinda et al., 2025). Therefore, community empowerment initiatives should integrate entrepreneurial capability development with digital literacy and branding strategies to create sustainable competitive advantages for local MSMEs.

Therefore, this community engagement program applied an integrated social digital entrepreneurship approach combining digital literacy, local branding, content creation, and sustainability storytelling. The program was implemented through observation, discussion, practical training, mentoring, and evaluation involving the MSME owner, lecturers, students, and community stakeholders.

The program aimed to strengthen the digital literacy, branding capability, and digital marketing readiness of the Loh-Loh Cem-Cem MSME. It also supported SDG 4 through community learning, SDG 8 through MSME development, and SDG 17 through collaboration between universities and local communities.

II. METHODS

This community engagement program was conducted during the International Community Service (ICS) 2 on 29 June - 2 July 2026 at Penglipuran Tourism Village, Bangli Regency, Bali, involving Loh-Loh Cem-Cem MSME as the community partner. The program adopted a Participatory Action Research (PAR) approach, emphasizing active collaboration between the university team and community members in identifying problems, implementing solutions, and evaluating outcomes. PAR is widely recognized as an effective approach for community empowerment because it encourages participation, shared learning, and sustainable capacity building (Chevalier & Buckles, 2023; Pain et al., 2024).



Figure 3 Welcoming session by the Manager of Penglipuran Tourism Village.

The implementation consisted of five sequential stages. The first stage involved preliminary observation and needs assessment to identify challenges related to digital literacy, branding, product promotion, and digital marketing practices. The second stage was conducted through a Focus Group Discussion (FGD) with the MSME owner to prioritize existing problems and formulate appropriate intervention strategies.



Figure 4 Workshop on the preparation of the traditional Loh-Loh Cem-Cem herbal beverage conducted by the MSME owner.

The third stage comprised interactive training and practical workshops focusing on digital branding, visual identity, product storytelling, content creation, and the utilization of digital marketing platforms. The fourth stage involved mentoring and direct assistance, enabling participants to apply the developed branding concepts and promotional content to their business practices. Finally, the fifth stage consisted of reflection and evaluation to assess participants' understanding, engagement, and adoption of the proposed digital marketing strategies.

The effectiveness of the program was evaluated using participatory observation, interviews, documentation, and reflective discussions with the partner. Qualitative data were analyzed descriptively by comparing the partner's conditions before and after the intervention, particularly regarding branding quality, digital literacy, promotional content, and readiness to utilize digital platforms. This descriptive evaluation approach is commonly applied in community engagement research to assess capacity development and behavioral change within community-based programs (Islam et al., 2024; Sharma & Sharma, 2024).

The overall implementation framework is presented in Figure 5.

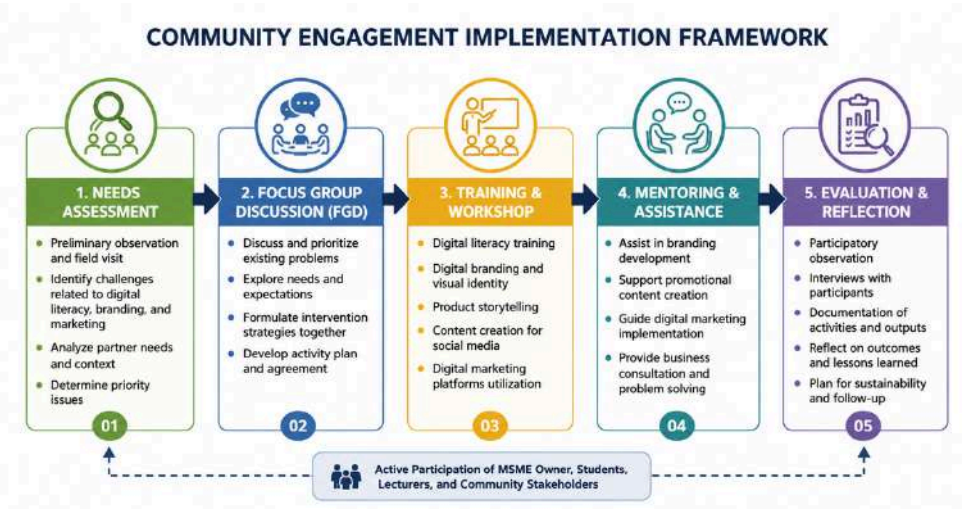


Figure 5 Community Engagement Implementation Framework

III. RESULT AND DISCUSSION

3.1 Initial Condition of the Partner

The initial observation identified several challenges faced by the Loh-Loh Cem-Cem MSME before the implementation of the community engagement program. Although the product possessed strong cultural value as a traditional Balinese herbal beverage, its digital marketing practices were still limited. Promotional activities mainly relied on direct tourist purchases and word-of-mouth recommendations, while social media utilization, visual branding, and digital storytelling had not been systematically developed.

Furthermore, the product packaging and promotional media had not fully reflected the unique identity of Loh-Loh Cem-Cem as a traditional beverage originating from Penglipuran Tourism Village. Similar conditions are commonly experienced by tourism-based MSMEs, where limited digital capability and branding reduce market competitiveness despite having products with high local value (Lu et al., 2024; Sharma & Sharma, 2024).

3.2 Program Implementation

The community engagement program was implemented through five integrated stages: (1) needs assessment, (2) Focus Group Discussion (FGD), (3) digital literacy and branding workshop, (4) mentoring, and (5) evaluation. The participatory approach enabled the partner to actively identify business challenges, develop branding concepts, and practice digital content creation based on their actual business needs.

The workshop covered digital branding, product storytelling, visual identity, social media content development, and the use of digital marketing platforms. Participants were encouraged to translate the cultural identity of Loh-Loh Cem-Cem into consistent branding messages that emphasize authenticity, local wisdom, and sustainability. Participatory training combined with practical mentoring has been shown to enhance the adoption of digital marketing among MSMEs by improving both technical competence and business confidence.

3.3 Program Outcomes

The implementation produced several positive outcomes. The partner demonstrated improved understanding of digital branding principles, stronger awareness of visual identity, and greater confidence in using digital media for business promotion. Practical mentoring also enabled

participants to produce more consistent promotional content aligned with the characteristics of the product.



Figure 6 Dissemination session of community engagement outcomes during the International Community Service (ICS 2) program



Figure 7 Collaborative networking among participants following completion of the International Community Service (ICS 2) program

In addition, the MSME developed a clearer product identity by integrating local culture, natural ingredients, and sustainability values into its branding strategy. These improvements are consistent with previous studies showing that digital literacy and branding capability contribute to stronger competitiveness and business sustainability among MSMEs (Valdez-Juárez et al., 2024; Sharabati et al., 2024).

Tabel 1 Comparison Before and After Program Implementation

Aspect	Before	After
Digital literacy	Limited understanding of digital marketing	Improved understanding of digital marketing concepts
Branding	Product identity not yet consistent	More consistent brand identity reflecting local values
Promotional media	Conventional promotion	Digital promotional content developed
Product storytelling	Not systematically communicated	Cultural and sustainability narratives incorporated
Digital readiness	Limited	Higher confidence in utilizing digital platforms

3.4 Discussion

The findings indicate that strengthening digital literacy alone is insufficient to improve MSME competitiveness. Greater impact was achieved when digital literacy was integrated with branding development, product storytelling, and direct mentoring. This integrated approach enabled the partner to connect local cultural identity with digital communication strategies, thereby increasing the value proposition of the product.

These findings support previous research indicating that digital transformation in SMEs should combine technological capability, innovation, and organizational readiness rather than focusing

solely on technology adoption (Valdez-Juárez et al., 2024; Zúñiga-Collazos et al., 2025). Likewise, studies on tourism SMEs emphasize that branding and digital marketing become more effective when they communicate authentic local experiences and cultural uniqueness (Shi & Xiao, 2024).

The implementation also demonstrated the importance of participatory community engagement. Active involvement of the MSME owner throughout problem identification, decision-making, and practical implementation fostered stronger ownership of the adopted innovations, increasing the likelihood of sustaining digital marketing practices beyond the completion of the program. Participatory approaches have consistently been reported to strengthen community empowerment and improve the long-term adoption of digital innovations among MSMEs.

IV. CONCLUSION

The community engagement program successfully strengthened the digital literacy and branding capacity of the Loh-Loh Cem-Cem MSME in Penglipuran Tourism Village through an integrated social digital entrepreneurship approach. The participatory implementation encouraged active involvement of the partner in identifying business challenges, developing branding strategies, and applying digital marketing practices.

The program improved participants' understanding of digital branding, enhanced promotional content development, and increased confidence in utilizing digital platforms for business promotion. Integrating local cultural identity with digital storytelling also contributed to strengthening product differentiation and market readiness.

This study demonstrates that community empowerment programs become more sustainable when digital literacy is combined with branding development, mentoring, and community participation. The proposed model offers a practical reference for universities and other institutions implementing community engagement activities aimed at strengthening the competitiveness of tourism based MSMEs.

V. ACKNOWLEDGMENTS

The authors gratefully acknowledge the financial support provided by Universitas Negeri Jakarta through the International Community Service (ICS) Grant Program under Grant No. 346/UN39/HK.02/2026 This financial support made the implementation of the community engagement activities and this study possible.

The authors would also like to express their sincere appreciation to the International Community Service (ICS) 2 Committee, the Faculty of Economics and Business, Universitas Negeri Jakarta, Penglipuran Tourism Village, and the owner of the Loh-Loh Cem-Cem MSME for their valuable cooperation and active participation throughout the implementation of this community engagement program.

The authors further acknowledge all students and local stakeholders who contributed to the successful implementation of the activities.

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