

Strengthening Rural MSME Digital Marketing and Branding Capabilities through a Low-Cost Local-Resource-Based Program

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Submitted:
August 29, 2026

Reviewed:
September 15, 2026

Revised:
September 24, 2026

Accepted:
September 30, 2026

Published Online:
October 04, 2026

Abstract

Purpose— This community service program addressed limited product identity, digital promotion, and marketing-content capabilities among rural micro, small, and medium enterprises (MSMEs) in Lerang Village, Indonesia. It aimed to strengthen participants' digital marketing and branding capabilities through a low-cost model based on local resources.

Implementation Method— The program involved 25 active MSME owners in Lerang Village and combined needs assessment, digital marketing and branding training, practical workshops, mentoring, and descriptive pre-test/post-test evaluation using a four-point questionnaire covering five competency indicators.

Results and Discussion— Post-program scores were higher across all five competency indicators, with the strongest relative change in digital content creation. Branding, digital marketing knowledge, local-resource-based promotion, and social-media marketing capability also improved. The pattern is consistent with the hands-on design and use of accessible digital tools.

Implications— The integrated low-cost approach can support practical MSME capability development using familiar tools and locally available resources. Continued mentoring and longer-term follow-up are needed before drawing conclusions about sustained market reach, customer growth, or business performance.

Keywords: Digital Marketing; Branding; Local Resources; MSMEs; Community Empowerment.
Paper type: Research Paper (Community Partnerships and Impacts)

1. Introduction

Micro, small, and medium enterprises (MSMEs) increasingly depend on digital capabilities to maintain market visibility, communicate with customers, and adapt business processes under resource constraints. Research on SME digitalization shows that technology adoption is shaped not only by access to tools but also by organizational capabilities, employee skills, business-model choices, and the ability to translate digital resources into practical routines (Bouwman *et al.*, 2019; Eller *et al.*, 2020; Papadopoulos *et al.*, 2020; Pingali *et al.*, 2023). In Indonesia, digital transformation has likewise been associated with broader market access and operational opportunities, while limited skills and resource constraints remain recurring barriers (Amri *et al.*, 2024; Priyono *et al.*, 2020; Purnomo *et al.*, 2024; Radjagukguk & Rusadi, 2025).

These constraints are visible among MSMEs in Lerang Village, Lanrisang District, Pinrang Regency, South Sulawesi. The participating businesses are concentrated mainly in culinary and local-food activities and rely on locally available resources. Before the program, common difficulties included inconsistent product identity, limited packaging and product-visual development, irregular social-media use, and limited ability to communicate product advantages beyond existing customer networks. These conditions created a practical need for marketing support that could be implemented with tools already available to business owners.

Branding and digital marketing address related but distinct needs. Branding establishes recognizable product identity through names, logos, labels, packaging, visual



Advances in
Community Services
Research

Vol. 5 No. 1, 2027
pp. 11-20

E-ISSN: 2985-9778

DOI: [10.60079/acsrv5i1.1217](https://doi.org/10.60079/acsrv5i1.1217)



presentation, and consistent messages, whereas digital channels provide relatively accessible means for communicating that identity. Studies of Indonesian MSMEs report positive relationships between digital marketing capability and marketing performance, while social-media adoption is influenced by perceived benefits, complexity, cost, competitive pressure, and organizational capability (Fu *et al.*, 2024; Hardiansyah *et al.*, 2024; Tatik & Setiawan, 2025; Usmayanti & Pangestu, 2022). Research in other SME contexts similarly shows that social-media capability and digital leadership can support innovation and performance, although outcomes depend on how digital tools are managed (Abbasi *et al.*, 2022; Borah *et al.*, 2022; Matosas-López, 2024).

Community-service initiatives have also demonstrated the value of practice-oriented branding, packaging, and digital-marketing assistance. Branding training has helped MSMEs develop product identities and begin online marketing, while mentoring programs have combined outreach, technical training, and hands-on coaching to strengthen digital practices (Ilham *et al.*, 2023; Latief *et al.*, 2024, 2026; Martadinata *et al.*, 2024; Samsinar *et al.*, 2024). However, rural micro-scale enterprises often require an intervention that integrates these elements in a low-cost form rather than treating branding, content creation, and digital promotion as separate activities.

Accordingly, this program aimed to strengthen MSME owners' digital marketing and branding capabilities through an integrated model combining simple brand-identity development, product-visual improvement, smartphone-based content creation, social-media use, and local-resource-based product narratives. The article contributes an evidence-grounded account of this capacity-building model and evaluates short-term changes in participants' knowledge and skills through descriptive pre-test and post-test measurements. The following sections review the supporting literature, describe the program and evaluation procedures, present the results, discuss their implications and limits, and outline a sustainability pathway.

2. Review of Literature

2.1 Digital Marketing and MSME Capability Development

Digital marketing uses digital technologies to communicate product information, interact with customers, and support market access. For SMEs, the value of digitalization depends on the ability to combine technology with organizational and human capabilities rather than simply adopting new platforms. Digital readiness in emerging-market SMEs includes the capacity to interpret technological opportunities, respond with agility, and implement digital practices in day-to-day operations (Pingali *et al.*, 2023). Related work shows that digitalization and business-model innovation can improve performance when firms experiment with and embed digital practices effectively (Bouwman *et al.*, 2019; Eller *et al.*, 2020).

Social media is particularly relevant to MSMEs because it can provide comparatively accessible communication and promotional channels. Studies identify cost, complexity, owner capability, organizational support, and competitive conditions as important influences on social-media marketing adoption (Abbasi *et al.*, 2022; Fu *et al.*, 2024; Tatik & Setiawan, 2025). In developing-economy settings, social-media use has also been linked with innovation capabilities and sustainable SME performance (Borah *et al.*, 2022). At the same time, digital engagement should not be assumed to generate business outcomes automatically; the commercial value of social-media activity depends on management quality and its integration with broader marketing actions (Matosas-López, 2024).

For Indonesian MSMEs, digital transformation research similarly emphasizes both opportunities and constraints. Studies report that digital marketing, innovation, and digital-economy adoption can support market and business performance, while skills, resources, and implementation capacity remain decisive (Amri *et al.*, 2024; Hardiansyah *et al.*, 2024; Purnomo *et al.*, 2024; Usmayanti & Pangestu, 2022). These findings support interventions that prioritize usable capabilities over technological sophistication.

2.2 Branding and Product Identity

Branding supports recognition and differentiation by giving products a consistent identity. For micro and small businesses, this identity can be expressed through brand names, logos, colors, labels, packaging, product photography, and recurring promotional messages. Digital channels extend these branding efforts by making visual and narrative content searchable, shareable, and reusable across customer touchpoints. The integration of branding and digital marketing is therefore especially relevant for resource-constrained firms seeking to improve product presentation without high promotional expenditure (Elkhouday et al., 2026; Sagala & Őri, 2024). Community-based interventions provide practical evidence for this integration. Martadinata et al., (2024) reported branding training that helped coastal MSMEs develop product identities and begin transitioning toward online sales. Ilham et al., (2023) emphasized packaging and promotional strategies in MSME branding assistance, while Hisyam and Fitriyah (2024) discussed digital marketing as a mechanism for strengthening the competitiveness of local products. Such initiatives indicate that branding assistance is most useful when it produces tangible assets that entrepreneurs can continue to use after formal training.

2.3 Local Resources, Digital Tools, and Community Capacity Building

Local resources can support product differentiation when raw materials, regional characteristics, production processes, community knowledge, and product stories are translated into brand narratives and promotional content. For culinary MSMEs in Lerang Village, these resources can become part of labels, photographs, captions, and social-media posts rather than remaining only as production inputs. This approach links place-based identity with practical digital communication and reduces reliance on externally produced marketing content. Capacity-building programs are more likely to be sustainable when participants practice with their own products and familiar tools. Indonesian community-service studies have used training, entrepreneurship mentoring, social-media assistance, and practical digital-marketing exercises to expand MSME capabilities (Latief et al., 2024, 2026; Samsinar et al., 2024). Broader SME research also shows that mobile and digital technologies can support business continuity and adaptation when firms possess the capability to use them effectively (Papadopoulos et al., 2020; Rakshit et al., 2021). These findings support a program design centered on smartphones, existing social-media platforms, and locally available business resources.

2.4 Integrated Low-Cost Digital Marketing and Branding Model

Digital marketing and branding are complementary: branding establishes product identity and differentiation, while digital marketing provides channels for communicating that identity. The literature indicates that digital marketing capability is linked to SME innovation and performance, but capability development requires learning, organizational readiness, and consistent implementation (Elkhouday et al., 2026; Fu et al., 2024; Sagala & Őri, 2024). A low-cost model is therefore appropriate when the objective is to build repeatable practices rather than dependence on external specialists. The program applies four linked components: basic brand-identity development, improvement of packaging and product visuals, creation of digital promotional content, and use of accessible social-media channels. Local resources are incorporated across these components as material for product differentiation and storytelling. The model is intentionally practical: participants use their own products and smartphones so that skills can be transferred directly into routine business activity.

3. Implementation Method

3.1 Program Setting and Participants

The program used a community-service intervention with a descriptive pre-test/post-test evaluation. It was conducted in Lerang Village, Lanrisang District, Pinrang Regency, South Sulawesi, Indonesia. The participating MSMEs were primarily engaged in food

and culinary businesses based on local resources, and the intervention focused on marketing and branding constraints identified during the initial assessment. Participants consisted of 25 active MSME owners from Lerang Village who had existing products and faced limitations in product identity, packaging, content creation, or the use of digital media for promotion. The same participant group took part in needs assessment, training, practical activities, mentoring, and evaluation. No separate control group is reported; accordingly, the evaluation is interpreted as a within-group descriptive comparison rather than a causal effectiveness test.

3.2 Activity Stages

3.2.1 Initial assessment.

Observation, brief interviews, and discussions were used to identify current marketing practices, social-media use, brand identity, packaging conditions, and the use of local resources as product advantages.

3.2.2 Digital marketing and branding training.

Participants received practical material on basic brand identity, simple logo development, labeling and packaging, smartphone-based product photography, caption writing, and the use of WhatsApp, Instagram, and TikTok for promotion.

3.2.3 Practical workshop.

Participants worked directly with their own products to improve visual identity, product photographs, captions, promotional content, and digital communication materials.

3.2.4 Mentoring and implementation.

Participants were assisted in applying the material to their daily marketing activities, with attention to brand consistency, digital content, social-media use, and communication of local product advantages.

3.2.5 Evaluation.

Observation, participant feedback, and pre-test/post-test measurements were used to describe changes in selected branding and digital-marketing capabilities.

3.3 Intervention Method

The intervention used a participatory training and mentoring approach in which participants applied the material directly to their own products. The design emphasized affordability, ease of use, and continued implementation with resources already available to participants.

Table 1. Intervention Components

Intervention Component		Activity	Practical Output
Low-Cost Branding		Development or improvement of brand names, logos, colors, labels, and simple packaging	MSME brand identity
Product Improvement	Visual	Smartphone-based product photography and product arrangement	More informative and attractive product photographs
Digital Creation	Content	Creation of captions, digital posters, short videos, and promotional content	Ready-to-use digital content
Digital Marketing		Use of WhatsApp, Instagram, and TikTok for promotion	Digital promotional channels

Source: Processed program data, 2026.

3.4 Evaluation Approach

Capability changes were evaluated descriptively using a pre-test before training and a post-test after training and practical mentoring. The questionnaire covered five indicators:

digital marketing knowledge, brand-identity development, digital content creation, use of local resources for promotion, and social-media marketing capability. Each indicator was scored on a four-point scale.

Indicator-level mean scores and participant-category distributions were used to compare the same 25 participants before and after the program. The evaluation is descriptive and does not report an inferential statistical test. Item-level questionnaire content and psychometric evidence are not reported in the article; therefore, the scores are interpreted as program-evaluation indicators rather than as estimates from a validated research scale.

Table 2. Four-Point Competency Scale

Score	Category
1	Very Low
2	Low
3	Good
4	Very Good

4. Results

4.1 Research Result

4.1.1 Initial Partner Condition

The initial assessment identified limitations across digital marketing, brand identity, packaging, digital content creation, and the use of local resources as marketing assets. Most participants already operated businesses and had marketable products, particularly food and culinary products, but promotion still relied largely on direct selling and personal customer networks. Some participants used social media, although its use was inconsistent and was not supported by a planned content approach.

Branding was also uneven. Several products lacked consistent names, logos, labels, descriptions, or visual characteristics, and packaging was generally functional rather than promotional. Local raw materials, production processes, traditional knowledge, and village-specific product stories had not yet been used systematically in digital promotional materials. These conditions supported the decision to integrate branding, visual content, and digital promotion within one low-cost intervention.

4.1.2 Program Implementation

The program combined training, practical workshops, and mentoring around four areas: digital marketing, simple brand identity, digital promotional content, and social-media use. Participants were introduced to WhatsApp, Instagram, and TikTok as accessible promotional channels and practiced preparing product messages, photographs, short videos, and other basic content.

Branding activities focused on names, logos, labels, packaging, and product descriptions. Participants also used their own smartphones to improve product photographs, develop captions, and prepare short promotional materials. Local resources were incorporated into product identity and storytelling so that raw materials, production characteristics, and local narratives could be communicated as product advantages.

4.3 Pre-Test and Post-Test Results

The descriptive pre-test and post-test results show higher mean scores after the program across all five competency indicators. The overall mean increased from 2.10 to 3.38. The largest indicator-level relative change occurred in digital content creation, while the highest post-test mean was recorded for the use of local resources in promotion.

Participant-category distributions changed in the same direction. Before the program, 17 participants (68%) were in the low category and none were in the very good category. After the program, 10 participants (40%) were categorized as good and 13 (52%) as very good, while the low category decreased to 2 participants (8%).

Table 3. Pre-Test and Post-Test Measurement of MSME Participants

No.	Indicator	Pre-Test Mean	Post-Test Mean	Relative Change
1	Digital marketing knowledge	2.08	3.36	61.54%
2	Brand identity development	2.12	3.40	60.38%
3	Digital content creation	1.88	3.28	74.47%
4	Utilization of local resources for promotion	2.24	3.44	53.57%
5	Social media utilization for marketing	2.16	3.40	57.41%
	Overall Mean	2.10	3.38	--

Note: Mean scores are based on a 1-4 scale. Relative change is reported for individual indicators only. Source: Processed program data, 2026.

Table 4. Distribution of Participants by Competency Level

Competency Level	Pre-Test n (%)	Post-Test n (%)
Very Low	3 (12%)	0 (0%)
Low	17 (68%)	2 (8%)
Good	5 (20%)	10 (40%)
Very Good	0 (0%)	13 (52%)
Total	25 (100%)	25 (100%)

Source: Processed program data, 2026.

4.2 Discussion

The post-program pattern indicates broad improvement in the capabilities targeted by the intervention. The strongest relative change occurred in digital content creation, which is consistent with the hands-on design of the program: participants used their own smartphones to take product photographs, prepare captions, and develop promotional materials. This practical orientation reduced dependence on unfamiliar or costly technology and is consistent with research showing that technological complexity, cost, and organizational capability influence digital and social-media adoption among SMEs (Abbasi *et al.*, 2022; Fu *et al.*, 2024; Pingali *et al.*, 2023).

The improvement in digital marketing and branding indicators also supports the integrated design. Participants were not only introduced to promotional channels but were guided to create recognizable product identities through labels, packaging, photographs, and consistent messages. This combination aligns with empirical and community-service work emphasizing digital marketing capability, social-media use, practical branding assistance, and packaging support for MSMEs (Hardiansyah *et al.*, 2024; Ilham *et al.*, 2023; Martadinata *et al.*, 2024; Tatik & Setiawan, 2025). It also reflects broader evidence that digital capability and innovation need to be developed together rather than treated as isolated technical skills (Borah *et al.*, 2022; Elkhoudary *et al.*, 2026).

The high post-program score for the use of local resources suggests that participants could translate knowledge already embedded in their products and production practices into marketing content. Local raw materials, production processes, and product stories were reframed as elements of brand identity rather than only as production inputs. This approach is consistent with community-oriented marketing assistance that links local product development with packaging, digital communication, and market presentation (Hisyam & Fitriyah, 2024; Latief *et al.*, 2024; Samsinar *et al.*, 2024).

The results also reinforce the value of combining formal training with practice and mentoring. Latief *et al.*, (2026) similarly used outreach, technical training, and hands-on coaching to strengthen MSME digital marketing capabilities, while Priyono *et al.*, (2020) and Rakshit *et al.*, (2021) show that SME digital adaptation depends on firms' ability to apply accessible technologies within existing capabilities and constraints. In Lerang Village, the use of familiar platforms and participant-owned smartphones reduced the practical threshold for continued use after training.

The evidence should nevertheless be interpreted cautiously. The evaluation describes immediate pre-test/post-test changes among one group of 25 participants and does not

isolate the program from other possible influences. The article does not report item-level questionnaire validation, so the questionnaire-based results should be interpreted as program-specific evaluation indicators. Higher short-term capability scores also do not by themselves establish sustained improvements in sales, customer reach, revenue, or business performance. Digital engagement can create business value only when it is managed effectively and integrated with broader marketing practices (Matosas-López, 2024). The findings therefore support short-term capability development after the program, not a causal claim about long-term competitiveness.

4.2.1 Implementation Evaluation

Implementation benefited from the use of participants' own products, smartphones, and familiar digital platforms. This made the activities directly applicable to day-to-day business practice and reduced the need for specialized equipment. Differences in digital literacy remained relevant, however, because some participants were more independent in creating content and managing digital media than others. Continued mentoring and peer support are therefore important for translating short-term learning into routine marketing practice.

4.2.2 Program Sustainability Plan

The sustainability plan centers on local capacity building. Participants with stronger digital skills can serve as MSME Digital Champions who support peers in content creation, social-media management, and brand consistency. Reusable branding materials, simple content calendars, peer learning, and periodic monitoring can help maintain the practices introduced during the program. This pathway is consistent with evidence that SME digital transformation is strengthened by ongoing learning, organizational readiness, and incremental implementation rather than one-time technology adoption (Eller *et al.*, 2020; Purnomo *et al.*, 2024; Sagala & Óri, 2024).

5. Concluding Remarks and Recommendation

The community service program was followed by higher participant scores in digital marketing and branding capabilities, particularly digital content creation, brand-identity development, social-media use, and the use of local resources as promotional content. The combination of practical training, hands-on exercises, and mentoring provided an accessible way for rural MSMEs to develop marketing capabilities using tools and resources already available to them.

The program's main contribution is the integration of low-cost branding, smartphone-based content creation, accessible digital channels, and local product narratives within one capacity-building model. The evaluation is limited to a single group, immediate pre-test/post-test observations, and incomplete instrument-validation documentation. Future implementation should include continued mentoring, clearer instrument documentation, and longer-term evaluation of sustained digital activity, market reach, customer engagement, and business performance before broader claims about competitiveness are made.

ACKNOWLEDGMENT

The authors would like to express their sincere gratitude to the Institut Teknologi dan Bisnis Nobel Indonesia, the Government of Lerang Village, Lanrisang District, Pinrang Regency, and all 25 MSME participants for their support, participation, and contribution to the implementation of this community service program. The authors also appreciate all parties who contributed to the training, mentoring, and evaluation activities. Their support was essential to the successful implementation of the program.

FUNDING STATEMENT

This research received financial support from Institut Teknologi dan Bisnis Nobel Indonesia.

CONFLICTS OF INTEREST

The author declares no conflict of interest.

DECLARATION OF GENERATIVE AI STATEMENT

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

AUTHOR'S CONTRIBUTION

FL: correspondence, formulation of activity ideas, understanding community problems, preparation of program objectives and design, Delivery of materials to participants, Ensuring that the content of the activity is in accordance with the needs of the target community, Finalization of the manuscript. **AF:** preparing extension or training materials, preparing educational media, delivering materials to participants, coordinating time, and supervising the implementation of activities. **HA:** technical implementation of activities, coordination with partners or participants, scheduling and venue arrangements, documentation of the activity process. **MFA & RAJ:** interpretation of the results of the implementation of PkM. **AMR:** documentation of activities, preparation of activity reports, collection of references, editing manuscripts.

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