

Community Assistance for KWT Marsudi Luhur in Building a Sustainable Brand Ecosystem for Liquid Organic Fertilizer Products through Digital Branding Optimization

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Abstract

This Community Service (PKM) activity aims to empower the Marsudi Luhur Women Farmers Group (KWT) through mentoring in building a sustainable brand ecosystem for Liquid Organic Fertilizer (POC) products. The main problems faced by partners are limited understanding of branding strategies and weak product identity. The method used involves comprehensive mentoring through branding training, product identity development, and digital marketing strategies. The program's effectiveness was evaluated through a pretest-posttest with a validated instrument (item-total correlation of 0.518-0.914) and reliability ($\alpha=0.827$). The results of the paired sample t-test showed a significant increase in participant knowledge with a p-value <0.001 and an increase in the average score from 35 to 87. The program successfully built the foundation of a sustainable brand ecosystem by increasing branding capacity and strengthening product identity. These findings reflect the importance of an integrated approach a combination of conceptual strengthening, practical development, and technology utilization in empowering community-based MSMEs to compete sustainably.

Keywords: Brand Ecosystem, Liquid Organic Fertilizer, Community Empowerment, Sustainable Branding.

A. INTRODUCTION

In the increasingly competitive and digitally-driven global economy, branding has evolved from a mere marketing tool into a critical strategic asset and a complex ecosystem essential for business survival and growth, particularly for Micro, Small, and Medium Enterprises (MSMEs) (Keller, 2013; Rosli et al., 2023). Contemporary branding theory posits that a brand is no longer a static identifier but a dynamic ecosystem—a network of interconnected elements including identity, narrative, customer experience, and digital presence that co-create value (Kapferer, 2012; Ramaswamy & Ozcan, 2020). For community-based enterprises like the Marsudi Luhur Women Farmers Group (KWT), which produces high-quality Liquid Organic Fertilizer (POC) from organic waste, leveraging this ecosystem approach is crucial. Despite the product's significant economic and environmental potential, the group embodies a common paradox in grassroots MSMEs: possessing a superior, eco-friendly product while being constrained by severe limitations in strategic marketing and branding capabilities (Goyal et al., 2022; Hidayat et al., 2023).

A situational analysis reveals this gap starkly through cognitive and technical lenses. While the POC product aligns perfectly with global trends toward sustainability and the circular economy (Kirchherr et al., 2023), KWT Marsudi Luhur's potential remains untapped. Cognitively, a significant knowledge gap exists; most members perceive branding merely as naming and logos, not as a strategic construction of value and meaning essential for building consumer loyalty and sustainable competitiveness (Nuseir, 2021; Aaker, 2021). This is compounded by a critical technical deficiency in digital capacity. An initial assessment showed that only 20% of members possessed basic digital literacy for marketing purposes, creating a severe competitive disconnect that prevents the group from communicating its product's green value proposition to a wider market (Juliana, 2024). This paradox underscores the core problem: a high-potential product is hindered by low strategic branding understanding and minimal digital adoption.

The urgency of intervention is magnified within the national and theoretical context. Empirically, data from the Ministry of Cooperatives and SMEs (2024) indicates that Indonesian MSMEs utilizing digital technology experience an average turnover increase of 35% compared to those using conventional methods.

Conversely, BPS (2024) notes that 67% of Indonesian MSMEs still face marketing and branding constraints, despite contributing 61.07% to the national GDP. This disparity highlights a critical need for strategic intervention that integrates theory and practice (Pramadhika et al., 2025). Theoretically, the solution lies at the intersection of several frameworks: sustainable brand ecosystems (Kapferer, 2012; Ramaswamy & Ozcan, 2020), green branding, and sustainability marketing (Chen, 2023; Papadas et al., 2022). Green branding integrates ecological values into brand identity as an authentic commitment, which is central for a product like POC that originates from recycled waste. Sustainability marketing extends this by emphasizing the creation of shared value for business, consumers, and society (Porter & Kramer, 2019; Gupta et al., 2023). Crucially, digital platforms are the indispensable medium for actualizing these strategies in the modern marketplace, enabling cost-effective storytelling, targeted outreach, and direct engagement that can transform a local product's narrative into a compelling brand identity (Chaffey & Smith, 2022; Tafesse & Wien, 2022).

Therefore, the justification for this community service program is firmly rooted in a science and technology (S&T) angle, addressing the identified *marketing constraint* through the strategic application of *digital technology*. The program posits that integrating foundational branding knowledge with practical digital marketing strategies within a participatory empowerment framework (Israel et al., 2023; Baum et al., 2022) is essential to unlock the latent potential of KWT Marsudi Luhur's POC (Saputra, 2025). This approach aims to transform a local product into a sustainable brand within a competitive ecosystem, leveraging digital tools to communicate and co-create economic, social, and environmental value.

B. IMPLEMENTATION METHODS

The community assistance program for KWT Marsudi Luhur in building a sustainable brand ecosystem was carried out using a participatory action research (PAR) framework, emphasizing active collaboration between the service team and KWT members in all stages of the program from problem diagnosis to solution implementation and evaluation (Israel et al., 2023; Baum et al., 2022). A mixed-method approach integrating quantitative (pre-test/post-test) and qualitative (observation, in-depth interviews, FGDs) methods was employed to comprehensively measure impact and capture the transformation process.



Figure 1. Documentation of Branding Training Activity Implementation

This activity was carried out in Padukuhan Kepuh, Pacarejo Village, Semanu District, Gunungkidul, Special Region of Yogyakarta over a six-month period. A total of 25 members of KWT Marsudi Luhur, consisting of housewives with diverse educational backgrounds and business experiences, were involved as active participants in the entire series of activities. The program implementation stage consisted of four main modules designed in a tiered and integrated manner. The first module focused on introducing branding concepts and the brand ecosystem through interactive lectures, group discussions, and case studies.

The second module (Brand Identity Development) focused on the practical science and technology aspects of creating tangible brand assets. The process began with collaborative workshops to determine the brand name and brand essence. For logo design, participants were introduced to simple, accessible design tools such as Canva. Through guided sessions, the group co-created a logo that symbolized growth, sustainability, and local wisdom. For product packaging, the assistance moved beyond aesthetics to ensure communicative and informative design. The team helped develop a packaging template that included crucial information:

product composition (organic waste ingredients), usage instructions, benefits, and the product's unique selling proposition (USP) regarding waste recycling. The design process prioritized clarity, visual appeal, and alignment with the green branding narrative.



Figure 2. The Process of Assisting Brand Identity Development.

The third module (Digital Branding Strategy) operationalized the link between technology and marketing. Training focused on specific, accessible digital platforms: WhatsApp Business for customer service and transactions, and Instagram for brand storytelling and community building. Participants were trained in practical content creation using smartphone cameras and basic editing tools (CapCut, Canva) to produce visual content. The content strategy specifically emphasized green storytelling, guiding participants to create posts and stories that documented the POC production process (from organic waste collection to fermentation), showcased environmental benefits, and featured testimonials from local users. This module aimed to transform the green branding concept (Chen, 2023) into tangible digital narratives (Tafesse & Wien, 2022).

The fourth module focused on developing a sustainability brand strategy, integrating the established green branding concepts and brand storytelling into a coherent long-term plan, emphasizing the creation of shared value (Porter & Kramer, 2019; Fatmawati & Arifin, 2023).

C. RESULTS AND DISCUSSION

Quantitative Results: Knowledge Transfer Effectiveness

The assistance program demonstrated a statistically significant impact on enhancing participants' comprehension of branding concepts and practices. A paired sample t-test revealed a highly significant increase of +148.6% in the average knowledge score, from 35 in the pretest to 87 in the posttest. The result was statistically robust with a p-value < 0.001, confirming that the observed improvement was not due to chance and solidly attesting to the effectiveness of the knowledge transfer methodology employed in the program.

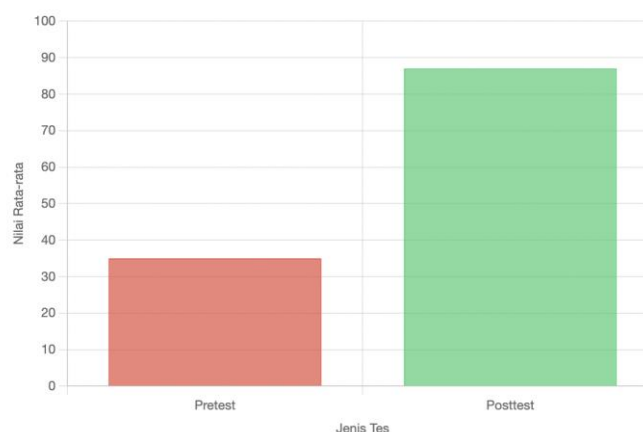


Figure 3. Graph Comparing Pretest and Posttest Results

Qualitative and Technical Outcomes

1. Transformation in Entrepreneurial Mindset

Qualitatively, the program catalyzed a profound shift in perspective among KWT Marsudi Luhur members. Initially viewing branding as an abstract and irrelevant concept for a micro-business, participants, through experiential learning, came to recognize it as a vital strategic investment. This was evidenced by increased confidence in articulating their product's unique value and a marked rise in proactive discussions concerning product innovation and marketing strategy, reflecting enhanced psychological capital and the internalization of shared value creation principles (Luthans et al., 2023; Wardana et al., 2021).

2. Tangible and Technical Outputs of the Intervention

The program's success is materially embodied in the new technical assets developed, which directly addressed the initial problem of weak product identity and digital invisibility.

Brand Identity Assets

The collaborative design process yielded a cohesive visual identity. The new logo, designed using Canva, incorporates symbolic elements representing organic growth and environmental sustainability. More critically, the product packaging was radically transformed from a simple, non-descript container into a communicative marketing tool. The new design features clear information on organic ingredients, usage instructions, benefits, and prominently highlights the product's origin from recycled organic waste, directly communicating its green value proposition (Papadas et al., 2022).

Digital Branding Assets

The group established a structured digital presence. An Instagram account (@poc_marsudiluhur) was optimized as the primary channel for green storytelling. Using smartphones and CapCut for editing, members began producing content that narrates the product's lifecycle—from organic waste collection to fermentation and application. This content strategy directly integrates the green branding concept, visually authenticating the sustainability claim and building an emotional narrative around environmental stewardship and community empowerment (Tafesse & Wien, 2022; Gupta et al., 2023).

Discussion: Integrating Knowledge, Technology, and Ecosystem Management

The dramatic leap in knowledge scores (from 35 to 87) signifies more than rote learning; it represents the acquisition of a practical framework for brand ecosystem management. Participants transitioned from passive producers to active brand managers capable of making informed decisions about visual identity, messaging, and digital engagement. This foundational knowledge is the prerequisite for the sustained application of the developed technical assets (Ramaswamy & Ozcan, 2020).

The successful adoption of a basic digital marketing strategy underscores a critical finding: strategic digital intervention can effectively bridge the competitive gap for grassroots MSMEs. This aligns with the research of Pramadhika et al. (2025) and Zhang et al. (2023), which found that MSMEs leveraging digital platforms demonstrate enhanced resilience and market reach. In this case, the integration of WhatsApp Business for logistics and Instagram for narrative-building created a low-cost, high-impact digital ecosystem. This technological empowerment allowed the group to transcend local geographic limits and begin constructing a brand narrative that resonates with broader market trends towards sustainability (UNEP, 2024; Juliana, 2024).

In conclusion, the results validate the program's integrated hypothesis. The significant knowledge transfer empowered the community with the strategic understanding necessary to manage their brand, while the concurrent development of tangible technical outputs—the visual identity and digital toolkit—provided the immediate means to execute that strategy. This combination of conceptual mastery and technical capacity building establishes a resilient foundation for KWT Marsudi Luhur's sustainable brand ecosystem (Hidayat et al., 2023; Sulastri et al., 2022).

D. CONCLUSION

The community assistance program for KWT Marsudi Luhur in building a sustainable brand ecosystem has successfully created a significant transformation in the branding capacity and entrepreneurial mindset of the group members. The program findings confirm that an integrated approach between conceptual

strengthening, practical development, and utilization of digital technology is effective in building the foundation for a sustainable brand ecosystem.

The significant increase in participants' knowledge scores, supported by robust statistical test results, serves as empirical evidence of the effectiveness of the implemented program. Based on the program findings, several recommendations are proposed for future development. First, continuous assistance is needed to ensure the implementation of the developed branding strategies. Second, strengthening digital capacity through more intensive training is required to optimize the use of technology in marketing. The sustainability of this program also needs to be linked to a broader strategy to empower local MSMEs, in accordance with an approach that sees the potential for an inclusive economy at the deepest levels of society (Pralhalad & Hart, 2020; Fatmawati & Arifin, 2023).

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