

## Optimizing the Visual Identity of MSMEs through Artificial Intelligence at UPT Pengembangan Mutu Produk Industri dan Teknologi Kreatif Surabaya

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### ABSTRACT

**Keywords:**

Artificial Intelligence,  
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*This community engagement program aims to strengthen the visual identity of Micro, Small, and Medium Enterprises (MSMEs) through the application of Artificial Intelligence (AI)-based design tools. Conducted in collaboration with UPT Pengembangan Mutu Produk Industri dan Teknologi Kreatif (PMPI-TK) Surabaya, the project responds to common challenges faced by MSMEs, including lack of branding knowledge, inconsistent visual design, and limited access to creative technology. The program was carried out in three phases: qualitative analysis through interviews and focus group discussions to identify specific branding obstacles; workshop-based training introducing AI tools such as Canva AI, Looka, and Adobe Firefly; and pilot implementation in which participants developed brand identity assets tailored to their products. Results indicate that 87% of the 15 participants demonstrated an improved ability to conceptualize and produce consistent brand assets after the workshops. The project also introduced basic legal literacy regarding intellectual property protection. By integrating AI and participatory training, the initiative offers a sustainable model for MSME empowerment in the digital economy.*

## INTRODUCTION

In today's highly competitive and digitally driven market, the ability to establish a strong and professional brand image is no longer optional for micro, small, and medium enterprises (MSMEs). A well-developed visual identity, which comprises elements such as logos, typography, color palettes, and consistent visual style, not only conveys professionalism but also helps build recognition, trust, and emotional resonance with consumers Kotler, P., & Keller, K. L. (2016); Hidayat, D., & Syamsudin, A. (2020). In a saturated market, especially within urban hubs like Surabaya, effective branding enables MSMEs to distinguish their products and services, drive customer loyalty, and enhance their competitiveness.

However, despite the proven benefits of visual identity, many MSMEs still operate without a clear or consistent identity system. This issue is particularly prevalent among businesses under the mentorship of UPT *Pengembangan Mutu Produk Industri dan Teknologi Kreatif* (PMPI-TK) Surabaya. These businesses face recurring challenges such as inadequate packaging design, the absence of professional logos, inconsistent use of brand elements across platforms, and little to no understanding of brand strategy Anggraeni, L., & Sulastri, E. (2019). Moreover, many of these MSMEs do not realize the critical role that visual identity plays in modern marketing, especially in digital ecosystems such as social media, e-commerce, and search engine optimization.

The core issues, as identified through early-stage needs assessments, can be categorized into four main problems: (1) limited knowledge of visual branding principles,

(2) poor or unprofessional packaging and logo design, (3) lack of access to digital design technologies, and (4) low awareness and utilization of intellectual property protections such as copyrights and trademarks Cahyadi, R., & Sari, D. (2021); Indrasari, E. (2024).

One key underlying cause is the limited financial and technical capacity of MSMEs to hire professional design services or access expensive software like Adobe Illustrator or CorelDRAW. This digital divide often leads to improvised visual identity using low-quality templates, stock clipart, or inconsistent visuals. As a result, MSMEs lose credibility and fail to position themselves strongly in the market Hidayat, D., & Syamsudin, A. (2020).

With the advancement of artificial intelligence (AI)-based design tools, new opportunities have emerged for non-designers to create high-quality visual identity at low or no cost. Platforms such as Canva AI, Looka, and Adobe Firefly offer intuitive interfaces where users can generate logos, define brand color palettes, and even visualize mockups without prior graphic design experience Babatunde, S. (2024); Sharma, S., Singh, G., Islam, N., & Dhir, A. (2024). This democratization of design tools presents a promising solution to help MSMEs leapfrog traditional barriers and engage more effectively with their target audiences.

Building on this potential, this community service program was initiated by a multidisciplinary team from Universitas Negeri Surabaya to address the visual identity challenges of 15 MSMEs under PMPI-TK Surabaya's mentorship. The goal was to provide structured training and mentorship in visual identity using AI-based tools, enabling the participants to conceptualize, produce, and apply cohesive brand identities aligned with their business goals and customer expectations.

This article presents the conceptual framework, implementation strategy, and preliminary outcomes of the program. It argues that by integrating AI-driven tools with design pedagogy tailored for non-designers, MSMEs can enhance their brand visibility and market adaptability. More broadly, the paper contributes to the discourse on AI for inclusive development, particularly in the context of community empowerment, digital literacy, and sustainable microenterprise growth.

## RESEARCH METHOD

This community engagement program employed a practical, problem-driven approach to address the branding challenges of MSMEs through structured stages of qualitative assessment, training, and pilot implementation. The methods aimed to empower participants to build stronger visual identities using accessible artificial intelligence tools. The three core strategies were as follows:

### 1. Qualitative Analysis

The project began with a qualitative investigation using interviews and focused group discussions with MSME owners. These activities were designed to uncover the specific obstacles that small businesses face in developing a strong and consistent brand identity. The findings informed the instructional content and tool selection for the subsequent training phase Kotler, P., & Keller, K. L. (2016).

2. Hands-on workshops were organized to introduce participants to AI-based tools for branding purposes. Sessions included tutorials on prompt-based design, AI-assisted logo generation, and simple data analysis for targeting visual messaging. Participants explored platforms such as Canva AI, Looka, and Adobe Firefly to develop visual content that matched their product categories and brand values Hidayat, D., & Syamsudin, A. (2020); Anggraeni, L., & Sulastri, E. (2019). Canva AI was selected for its low barrier of entry and wide adoption among beginner users, especially in Indonesia's MSME sector.
3. Following the training, a pilot implementation phase was conducted in which selected MSMEs applied their new skills to create and refine their visual identities. This included producing logos, basic brand kits, and sample promotional assets. The AI-generated outputs were evaluated collaboratively, and mentorship was provided to help participants finalize their branding. This stage also included initial guidance on copyright and intellectual property registration Cahyadi, R., & Sari, D. (2021); Indrasari, E. (2024).

By combining participatory learning with accessible technology, the project aimed to enable MSMEs in Surabaya to independently manage their branding strategies. The broader goal was to strengthen their business performance and market competitiveness through improved visual identity design supported by artificial intelligence.

## RESULTS AND DISCUSSION

The implementation of the program revealed several key findings regarding the role of artificial intelligence (AI) in empowering MSMEs to improve their visual branding. The outcomes are categorized into two main areas: (1) conceptual awareness of visual identity, and (2) practical skills in AI-assisted design.

### 1. Improved Awareness of Visual Branding

One of the most immediate outcomes observed during the initial workshops was a shift in participants' understanding of what constitutes a strong brand identity. Prior to the training, many MSME owners associated branding merely with having "a logo," without considering elements like typography, color harmony, or visual consistency. Inconsistencies in the placement, color use, and font selection across promotional materials were common.

**Table 1.** List of workshop's participants

No.	Owner Name	Msmes Name	Category
1.	Luluk Ariani	Dapur Hanna	Makanan
2.	Maulia Tri	Maffin Kitchen	Makanan
3.	Vita Hario	Denmas	Makanan

4.	Nur Fitriyah	FD Family	Makanan
5.	Nadira Ayu Larasati	Naira Perfumery	Parfum
6.	Luthfia Rahmi Pratiwi	Tropical Ocean Spice	Makanan
7.	Diana Setyowati	Haray	Herbal
8.	Noerindah	Kintan	Makanan
9.	Sri Winarni	Windrasari	Ecoprint
10.	Mamik Sutini	Jajanandin	Makanan
11.	Upik Marlina	Dapur Bundo	Makanan
12.	Murpini	Jamu Seger Bu Mur	Minuman

Through guided discussions and case examples, participants began to realize the strategic value of consistent branding in shaping customer perception and trust. This aligns with prior studies that emphasize how visual elements contribute significantly to brand recall and emotional connection with consumers Kotler, P., & Keller, K. L. (2016). Participants also responded positively to demonstrations of visual coherence, how matching the tone, color, and layout across platforms (e.g., packaging, social media, banners) can enhance the sense of professionalism and legitimacy of a business. As a result, 87% of participants reported a stronger understanding of how identity design can impact their sales and customer engagement.



**Figure 1.** The facilitator delivers a session on improving MSME awareness of visual branding principles.

The facilitator is delivering a presentation on the principles of effective visual branding for MSMEs, emphasizing the importance of consistency, typography, and color harmony. Participants are actively listening, taking notes, and engaging in the discussion. This session marks the beginning of their exposure to design thinking and brand strategy.

## 2. Practical Skill-Building Through AI Tools

Equipping participants with technical skills in AI-powered design platforms was a core aim of the program. Most participants had never used professional graphic design software before and expressed anxiety about creating visual content. The introduction of user-friendly AI platforms like Canva AI, Looka, and Adobe Firefly significantly lowered the entry barrier.

Participants learned how to generate logos using prompt-based design, choose color palettes appropriate for their product type, and apply visual hierarchy in their designs. Several MSMEs produced multiple logo iterations, and through peer and mentor feedback, they were able to refine their work to reach visually compelling outcomes. The AI platforms offered immediate previews and editable templates, which helped participants visualize their branding in real-world contexts, such as on product labels, Instagram feeds, and merchandise packaging. This hands-on approach proved especially effective in fostering creative experimentation and reducing design anxiety Hidayat, D., & Syamsudin, A. (2020); Anggraeni, L., & Sulastri, E. (2019).

## 3. Strengthening Ownership and Independence

Beyond skill acquisition, the program fostered a deeper sense of confidence and ownership. Business owners who had previously outsourced their branding now felt capable of making design decisions independently. This empowerment not only saved them costs but also allowed for better alignment between their brand image and business values.

Several participants expressed interest in continuing their branding efforts post-program, with some actively preparing to register their new logos for intellectual property protection (HKI). This reflects a growing awareness not just of design, but of legal and strategic branding frameworks Cahyadi, R., & Sari, D. (2021).



**Figure 2.** Participants of the training program on AI-assisted visual branding for MSMEs.

MSME participants are involved in hands-on training using AI-powered design tools. Some are seen interacting with laptops and smartphones to create logo drafts using platforms like Canva AI and Looka. The collaborative environment fosters peer-to-peer feedback, guided by mentors from Universitas Negeri Surabaya.

As part of the initiative to strengthen the visual branding of Micro, Small, and Medium Enterprises (MSMEs), a series of logo designs were developed using AI-assisted tools. These logos aim to reflect the identity, values, and market positioning of each MSME partner. The following are the finalized logos:

**Table 2.** Logo Design Result

No.	MSMEs Name	Logo
1.	Jamu Seger Bu Mur	
2.	Dapur Bundo	

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3. Jajanandin



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4. Windrasari



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5. Kintan



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6. Haray



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7. Naira



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8. Maffin Kitchen



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9. Dapur Hanna



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10. Tropical Ocean Spice



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These logos were developed through a collaborative design process involving AI-generated visual exploration and human creative direction. The goal was to provide each MSME with a distinctive and professional visual identity that enhances brand recognition and market appeal. A curated collection of AI-generated logos representing the unique identity of each MSME. The designs highlight a range of sectors, from food and beverage to herbal products and lifestyle goods. Each logo reflects the business values, market target, and aesthetic preferences discussed during the mentoring phase.

#### 4. Challenges and Opportunities

While the program achieved its primary goals, it also uncovered some persistent challenges. For example, participants with very limited digital literacy still required close assistance when navigating AI tools. In response, the team developed video tutorials in the local language to support continued learning beyond the workshop period. Another limitation was the need for access to stable internet and personal devices, factors that still limit scalability for certain microbusinesses. Nevertheless, the overall positive reception and visible transformation in branding outputs indicate that AI-assisted branding holds great promise for grassroots economic empowerment Indrasari, E. (2024).

#### CONCLUSION

This community engagement initiative has illustrated how strategic integration of artificial intelligence (AI)-based design tools can significantly elevate the visual branding capabilities of Micro, Small, and Medium Enterprises (MSMEs), particularly those under institutional mentorship such as the PMPI-TK Surabaya. The program addressed key challenges faced by MSMEs, including limited design literacy, poor access to professional branding resources, and low awareness of the importance of consistent visual identity, by offering a structured, participatory, and technology-assisted approach to capacity building.

Through a phased method involving qualitative assessments, workshops, and pilot implementation, MSME participants were guided to not only understand the theoretical foundation of brand identity but also to practice its application using AI tools such as Canva AI, Looka, and Adobe Firefly. These tools were selected for their accessibility, ease of use, and suitability for non-designers, ensuring that even participants with no prior exposure to digital design were able to engage meaningfully in the creation and refinement of their brand assets.

The outcomes of the program can be seen on multiple levels:

1. **Cognitive Development:** There was a marked increase in participants' conceptual awareness of branding beyond the mere use of logos. They began to recognize the importance of cohesive elements such as typography, color, composition, and layout, in shaping customer perception and emotional trust, which are crucial for brand loyalty and market positioning.
2. **Technical Skill-Building:** Hands-on training allowed participants to become familiar with AI-assisted workflows for logo generation, color palette selection, and promotional content development. These skills helped demystify the design process and reduce psychological barriers related to technology use.
3. **Empowerment and Autonomy:** Participants expressed increased confidence in managing their own branding processes, reducing their dependence on external service providers. This not only represents a cost-saving benefit but also promotes greater alignment between the business vision and the brand's visual communication.
4. **Sustainability and Legal Awareness:** The program incorporated basic training on intellectual property rights, encouraging participants to consider trademark registration for their newly developed logos and brand elements. This addition strengthens the long-term viability and protection of their business identity.
5. **Challenges and Future Considerations:** While the program yielded positive outcomes, it also identified persistent barriers such as low digital literacy among some participants and infrastructural constraints like limited internet access and device availability. These insights emphasize the need for ongoing support through locally relevant digital literacy programs and infrastructure development.

In summary, the initiative demonstrates that with the right pedagogical approach and tools, even resource-constrained MSMEs can be equipped to develop impactful and professional brand identities. The use of AI not only bridges the skill and access gap but also provides a scalable solution for broader economic empowerment. The success of this program underscores the role of interdisciplinary collaboration, combining design education, community outreach, and technological innovation, in driving inclusive growth within Indonesia's creative economy ecosystem.

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