

## Digital Transformation of MSMEs through the Application of Generative AI in Branding Strategy

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### Abstract

*This community service program aims to enhance the knowledge and skills of MSME actors in utilizing Generative Artificial Intelligence (Generative AI) to strengthen branding strategies in the digital era. The training was held offline on May 16, 2025, at Telkom University Surabaya Campus, attended by 25 MSMEs fostered by Telkom CDC Witel Suramadu. The implementation method adopted a learning by doing approach, focusing on prompt engineering using ChatGPT to produce product visuals, social media content calendars, and business slogans. Evaluation results show that participants found the material highly relevant to their needs (average score 4.63), easy to understand (4.56), and expressed strong interest in similar future programs (4.75). These findings indicate that hands-on training using a single AI platform can significantly improve MSMEs' digital readiness, especially in marketing and visual communication. The program also fostered ethical awareness regarding AI use. This initiative contributes to community-based digital transformation and has strong potential for broader replication.*

**Keywords:** community service, MSMEs, Generative AI, ChatGPT, digital branding

### INTRODUCTION

Community service is one of the main pillars of the Tri Dharma of Higher Education which not only emphasizes the transfer of knowledge from academics to the community, but also strengthens collaboration between universities and communities in responding to the real challenges of social and economic development (Mtawa, 2019). Through community service, universities are expected to become active agents of social change, expanding the meaning of higher education not only as a producer of knowledge, but also a driver of the welfare of the wider community, especially in the era of rapid development of artificial intelligence (AI) technology.

The development of artificial intelligence (AI) technology, in particular *Generative AI* (GenAI), has brought significant transformation in various sectors, including the micro, small, and medium enterprises (MSMEs) sector. This technology allows users to produce visual, text, and video content automatically and instantly, making it very potential in supporting the efficiency and creativity of business actors (Kaczorowska-Spychalska, Kotula, Mazurek, & Sułkowski, 2024). Although the adoption of GenAI has begun to spread in large companies, the use of this technology among MSMEs is still relatively low, mainly due to limited resources,

digital literacy, and access to relevant training (Hussain & Rizwan, 2024).

Several studies have shown that GenAI can improve the innovation capabilities of MSMEs and contribute to the economic growth of small business actors (Mao, Wei, & Zhu, 2025). In addition, GenAI has also been proven effective in streamlining business activities, such as the production of marketing materials, product description creation, content planning, and customer communication (Kusetogullari, Kusetogullari, Andersson, & Gorschek, 2025). However, many MSME actors still do not understand this potential optimally. This is exacerbated by the low awareness of the risks of unethical use of AI, such as the misuse of fake content or visual manipulation (deepfake), which can actually harm the business reputation (Tawil, Mohamed, Schmoor, Vlachos, & Haidar, 2024).

Previous literature tends to highlight the benefits of GenAI at the macro level or through a survey approach, without touching on direct training practices at the community level. In fact, for this technology to be truly inclusive, an applicative and contextual service-based approach is needed (Pradhan, Dash, Sharma, & Ullah, 2023). One of the main challenges for MSMEs, especially those under the guidance of Telkom CDC in the Suramadu area, is the branding aspect. Many MSME actors do not yet have professional visual content, are inconsistent in creating promotional content calendars, and

have difficulty formulating a strong business tagline. This problem hinders them from competing digitally and in the local market.

To answer this challenge, a training activity entitled "Utilization of Generative AI for MSME Business" will be held on May 16, 2025 at the Digital Startup Laboratory, Telkom University Surabaya Campus. This training involved 25 MSME participants from various sectors such as food, fashion, and services. The materials presented included an introduction to AI technology, business case studies, prompt engineering practices with the CTEIR Framework approach, and discussions on the ethics of using AI. Direct practice sessions were conducted to help participants improve product photos using AI, create a one-month content calendar, and create a selling business slogan.

The scientific novelty of this activity lies in its integrative approach, combining technical training, ethical awareness, and the application of GenAI in the context of real MSME branding. This activity not only adopts existing theories in the literature, but also presents empirical data from the field on how GenAI training impacts on increasing digital readiness, marketing creativity, and ethical understanding of participants.

The purpose of this service is to improve the branding capabilities of MSMEs through practical and easily accessible GenAI training, build awareness of the ethical use of AI, and encourage inclusive adoption of digital technology among local MSMEs.

## IMPLEMENTATION METHOD

The training activity was carried out offline on Friday, May 16, 2025, at 08.00–12.00 WIB, at the Digital Startup Lab, Telkom University, Surabaya Campus. This activity is part of a community service program designed to improve digital literacy for MSMEs, especially in utilizing Generative AI technology to strengthen branding strategies. The training method used is the learning by doing approach, which allows participants to actively engage in simulations, direct practice, and guided discussions based on real problems faced by micro-entrepreneurs.

The activity participants numbered 25 people who were UMKM actors fostered by Telkom CDC Witel Suramadu, with diverse business sector backgrounds, such as culinary, fashion, crafts, and services. The training session was facilitated by a team of lecturers from the Digital Business Study Program, Telkom University Surabaya, namely Ir. Dominggo Bayu Baskara, M.MT., PMP., who is an expert in the field of project management and digital transformation of UMKM. He was assisted by two member lecturers: Krisnayanti Aditasari, S.M., M.MT., who focuses on business innovation and technology-based community empowerment; and Adisya Resti Rahmadanti, S.M., M.B.A., who is an expert in digital marketing and content strategy development.

During the activity, participants not only get theoretical materials, but also do hands-on practice in compiling content calendars, generating AI-assisted business slogans, and optimizing product visualization with the help of text-to-image technology. This approach is designed to ensure that the training has a real and applicable impact on increasing the branding capacity of MSMEs.

The stages of the implementation method can be seen in Figure 1 as follows:

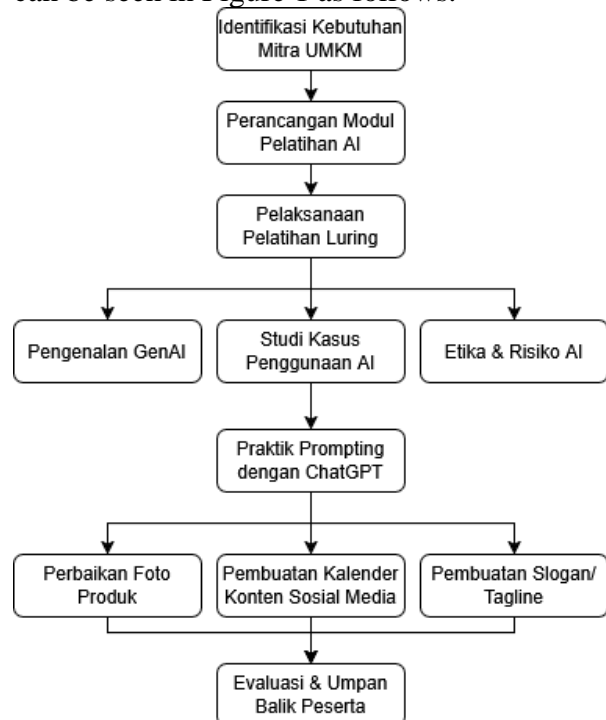


Figure 1. Implementation method

Prior to the implementation of the activity, a needs assessment was conducted

through communication with foster partners to identify the main problems faced by MSMEs. One of the key findings was the weak aspects of branding and digital promotion, which resulted in low competitiveness in the online market. Based on this, a training module was designed entitled "Utilization of Generative AI for MSME Business" which focused on improving branding capabilities through one of the platforms *Generative Popular AI*, namely ChatGPT.



Figure 2. Module View

The training module consists of four main parts: (1) introduction to technology *Generative AI* and its potential for SMEs, (2) case studies of the use of AI in small businesses, (3) understanding the risks and ethics of using AI, and (4) effective prompt-writing techniques using the CTEIR framework (*Context, Task, Example, Instruction, Refine*). Each section is presented sequentially and is designed to be followed directly by a practical session.



Figure 3. Delivery of Material *Generative AI*

All training activities are carried out using the ChatGPT application. In the practical session, participants are invited to provide prompts to ChatGPT according to their respective business needs. One of the activities carried out is to perfect product photos by giving instructions to ChatGPT to produce suggestions for visual improvements or product presentation

styles to appear like the results of a professional photographer. In addition, participants are also asked to prepare a content calendar for a full month for their business social media, with the help of ChatGPT to generate content ideas, determine platforms (Instagram, TikTok, YouTube, or Facebook), design weekly themes, determine content production tools, and compile performance indicators (KPIs). Another activity that is no less important is the preparation of a business slogan or tagline, where ChatGPT is used to produce several alternative taglines that are short, strong, and in accordance with the participant's target market.

The evaluation method was carried out through direct observation of participant involvement, documentation of practical results (photo output, content calendar, and slogan), and distribution of feedback questionnaires to assess participants' perceptions and understanding of the use of AI in the context of MSME branding. Participant responses were analyzed descriptively to measure the impact of the training on participants' digital readiness and ethical awareness.



Figure 4. Prompting Practice Assistance

The use of the ChatGPT application as the main tool provides advantages in terms of efficiency, consistency of approach, and ease of replication. This approach is considered effective in reducing technological barriers and building the trust of MSMEs to integrate AI as a strategic partner in business management.

## RESULTS AND DISCUSSION

The community service training activity held on May 16, 2025 received a very positive response from the participants. Based on the results of filling out the questionnaire from 16 participants, several scientific findings can be identified that reflect the effectiveness of the



program both in terms of material, methods, and impact on participants.

Table 1. Results of Activity Evaluation by Participants

Assessment Aspects	Average value	Interpretation
Material Suitability	4.62	Very satisfied
Time Conformity	4.38	Very satisfied
Clarity of Material	4.56	Very satisfied
Committee Services	4.75	Very satisfied
Continued Hope	4.75	Very satisfied

The average score for the indicator of suitability of materials to participants' needs reached 4.63 on a scale of 5, indicating that the training materials were considered very relevant to the real conditions and challenges faced by MSME actors. This indicates that the training design has succeeded in accommodating the specific needs of participants, in line with the literature stating that need-based training increases the effectiveness of technology adoption in MSMEs (Mao, Wei, & Zhu, 2025).

The clarity aspect of material delivery also received a high score of 4.56, which reflects that the practical approach through the prompt engineering method using ChatGPT was considered easy to understand by participants, even though the majority of participants did not have a technology background. This confirms the findings of Kusetogullari et al. (2025), that Generative AI can be accessed by non-technologists with a simple and contextual training approach.

In terms of implementation time, a score of 4.38 indicates that although the training is considered quite appropriate in terms of time, there are several suggestions from participants regarding the need for a longer duration. This is understandable considering that the training was held on Friday and had to be adjusted to prayer times, so that practice time was relatively limited. This phenomenon shows that for similar activities in the future; time allocation is a crucial factor in maximizing knowledge transfer.

The committee service aspect and program sustainability expectations each received the highest score of 4.75, indicating that participants felt appreciated, comfortable, and considered this activity useful and worthy of

being continued routinely. This reinforces the importance of institutional support in building trust and sustainability of community-based digital transformation initiatives (Kaczorowska-Spychalska, Kotula, Mazurek, & Sułkowski, 2024).

Overall, the main scientific findings of this activity are that the use of Generative AI in hands-on practice-based training is able to bridge the digital limitations of MSME actors, especially in terms of branding and marketing communications. Participants who were previously unaware of the potential of AI were able to produce visual content, social media content plans, and business slogans independently after participating in the training. This supports the initial hypothesis that structured and contextual AI training is able to improve MSMEs' digital readiness and branding innovation.

Comparison with previous studies also shows consistency. Hussain and Rizwan (2024) noted that AI adoption among MSMEs tends to increase when supported by applicable and user-friendly training. On the other hand, this activity provides new contributions in the form of empirical data from community service practices that show that AI technology can be adopted not only by large-scale industrial actors, but also by local community-based MSMEs with the right approach.

## CONCLUSION

The training activity "Utilizing Generative AI for MSME Business" proved that a hands-on practice-based training approach with the help of one main platform, namely ChatGPT, is able to improve the understanding and skills of MSME actors in the aspect of digital branding. The findings show that this training is not only relevant to the needs of the participants, but also effective in building readiness for technology adoption in an applicable and ethical manner.

This training provides scientific contributions in the form of a contextual, participatory training model that focuses on solving real problems faced by MSMEs. The success of participants in producing promotional content, social media content calendars, and business slogans through AI assistance shows that technical limitations and digital literacy can

be overcome through well-structured training. This activity demonstrates the importance of collaboration between educational institutions and MSMEs in encouraging the inclusive adoption of new technologies.

The main conclusion of this activity is that Generative AI training designed according to needs and delivered with practical and humanistic methods can be an effective strategy to strengthen the competitiveness of MSMEs, especially in terms of improving the quality of brand identity and communication in the digital era. This approach has the potential to be replicated more widely as part of a community-based digital transformation strategy.

## SUGGESTION

Based on the results of the activity, it is recommended that the training program on the use of Generative AI for MSMEs not stop as a one-time activity, but can be further developed in the form of a sustainable program. One potential form of follow-up is the implementation of periodic coaching clinics or mini bootcamps that are more focused and thematic, such as special sessions on creating AI-based content, increasing digital presence on e-commerce platforms, or customer management strategies with the help of chatbots. Follow-up training should also take into account the segmentation of participant needs, so that the approach can be more personal and effective. In addition, long-term monitoring and evaluation are needed to see the extent to which the skills acquired can be implemented in real terms in MSME business operations. Several obstacles that may be faced, such as limited devices, digital literacy, or the availability of time for business actors, also need to be considered in designing follow-up activities so that this program is truly inclusive and sustainable.

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