

ENHANCING MULTILINGUAL DIGITAL MARKETING COMPETENCE THROUGH ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGY AT THE MAGELANG CITY VOCATIONAL TRAINING CENTER (UPT BLK)

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Abstract

This community service project focuses on enhancing multilingual digital marketing competencies through the utilization of artificial intelligence (AI) technology at the Job Training Center (UPT Balai Latihan Kerja) of Magelang City. The program was designed to improve the skills of MSME (Micro, Small, and Medium Enterprises) participants in leveraging AI for digital marketing, with an emphasis on the effective creation of multilingual content. The project was implemented in three main stages: (1) Planning, which involved preparatory activities, identification of participants' needs, and the development of relevant training materials; (2) Implementation, as the core phase, in which participants received hands-on training on the application of AI technologies particularly ChatGPT for generating marketing content, social media posts, and blog articles in multiple languages; and (3) Evaluation, during which participants' competency improvements were measured through direct assessments of their generated content and the completion of questionnaires. The evaluation results indicated a significant improvement in participants' abilities to produce engaging and multilingual digital marketing content, as well as a deeper understanding of AI utilization in marketing strategies. This program is expected to make a substantial contribution to expanding the market reach of MSMEs and enhancing their competitiveness in an increasingly global market environment.

Keywords: Digital Marketing, MSMEs (Micro, Small, and Medium Enterprises), Artificial Intelligence (AI), Multilingual

INTRODUCTION

The rapid development of information and communication technology (ICT), particularly in the field of digital marketing, has created both challenges and opportunities for the workforce in Indonesia (Rosadi & Tomy, 2025). Digital technology facilitates product marketing, expands market reach, and enables more effective personalization in marketing strategies (Ningsih, 2024). Digital marketing which involves the use of online platforms to promote products or services has become an integral component of modern business

strategies. Alongside the rapid advancement of digital technologies, including the use of artificial intelligence (AI), competencies in digital marketing are increasingly essential not only for large-scale businesses but also for small and medium-sized enterprises (SMEs) and workers in the informal sector (Indriani, 2021).

In the context of globalization and increasingly open international trade, digital marketing no longer relies solely on local languages but increasingly incorporates multilingual approaches to reach global markets. The use of multilingual artificial intelligence (AI) technologies enables companies and entrepreneurs to generate relevant marketing content in multiple languages, thereby expanding market reach and improving marketing efficiency (Xu & Lee, 2020). Research conducted by Liu et al. (2019) indicates that the integration of AI in digital marketing can enhance the effectiveness of marketing strategies by analyzing consumer behavior data and providing more targeted content recommendations.

One increasingly popular application of AI technology among small and medium-sized enterprises (SMEs) is ChatGPT, a large language model developed by OpenAI. SMEs can utilize ChatGPT across various aspects of digital marketing, including content creation and customer interaction. This technology enables SMEs to produce engaging marketing materials such as product descriptions, social media posts, and blog articles in multiple languages, without requiring advanced language proficiency (Haryanto, 2024; Fazrie et al., 2025). Additionally, ChatGPT can support customer service automation through chatbots, providing quick responses and enhancing customer experience with more personalized interactions (Prasetyo & Nurhadi, 2020). This is particularly beneficial for SMEs aiming to reduce operational costs while maintaining high-quality customer service.

However, despite advancements in digital marketing technologies, training in Indonesia including in regions such as Magelang City remains largely limited to the use of basic digital marketing tools, such as social media and e-commerce platforms. Therefore, it is essential to enhance the competencies of the workforce, especially in utilizing emerging technologies such as AI to create more creative content that can engage international audiences. One of the key challenges is the limited understanding of how to use AI technologies for multilingual marketing content creation (Kurniawan & Setiawan, 2022).

On the other hand, AI technologies with multilingual capabilities allow for the automated generation and management of translatable content, facilitating the international marketing of local products. AI is not only useful for content creation but also plays a role in market analysis and the efficient management of digital advertising campaigns (Prasetyo & Nurhadi, 2020). Therefore, integrating AI technologies into digital marketing training at the UPT Vocational Training Center (Balai Latihan Kerja) in Magelang City can significantly improve the quality and effectiveness of local product marketing with a global market orientation.

In response to this need, this community engagement initiative aims to enhance the digital marketing competencies of trainees at the UPT Vocational Training Center in Magelang City through the application of AI technologies capable of generating and processing multilingual marketing content, thereby increasing their potential to compete in the global market.

IMPLEMENTATION METHOD

This community engagement initiative was conducted with the objective of enhancing digital marketing competencies through the use of artificial intelligence (AI) technologies at the UPT Vocational Training Center (Balai Latihan Kerja) in Magelang City. The stages of this activity refer to the three major phases of the design process: planning, design, and implementation (Gibson, 2009). Gibson's model was further developed into several detailed stages: (1) Planning, which involved preparatory activities; (2) Implementation, which constituted the core training activities; (3) Assistance, where participants were directly guided by lecturers and facilitators in practicing copywriting using the AI application ChatGPT; and (4) Evaluation, in which participants were given questions to assess the effectiveness of the program.

The success of the initiative was assessed through direct observation of participants' practical outcomes and performance during each stage preparation, implementation, assistance, and evaluation. This assessment was conducted by instructors using a rubric designed to evaluate the improvement of digital marketing competencies through the integration of AI technology.

The planning phase began with a needs assessment survey to identify participant profiles and their understanding of digital marketing and AI technology. This survey was essential for tailoring the training content to the specific needs of the participants, particularly those from micro, small, and medium enterprises (MSMEs) (Prasetyo & Nurhadi, 2020). Following the survey, a socialization session on copywriting training was conducted to introduce AI technology and demonstrate how it can be used in multilingual digital marketing to expand global market reach (Xu & Lee, 2020).

After the training, a mentoring phase was conducted to ensure that participants could apply the knowledge they had acquired in their marketing practices. This phase aimed to provide practical solutions to the challenges participants faced in implementing AI in real-world settings (Kurniawan & Setiawan, 2022). An evaluation was conducted to measure the effectiveness of the training program, using participant feedback to inform future improvements in training quality (Indriani, 2021).

RESULTS AND DISCUSSION

This activity was held from April 29 to 30, 2025, at the Auditorium of the UPT Vocational Training Center (Balai Latihan Kerja/BLK) in Magelang City, with a total of 48 participants. The participants came from various training programs offered by the BLK and were individuals currently enrolled in practical skills training, including pastry and bread making, western-style food preparation, and barista training. The training was designed as a response to the challenges faced by micro and small business actors in marketing their products amidst the rapid advancement of digital technology and increasingly open market competition. In this context, the ability to leverage digital technologies particularly artificial intelligence (AI) alongside multilingual communication skills, has become a critical component of relevant and effective marketing strategies.



Figure 1. Pre-Training Needs Identification Chart

Source: Author's documentation

Preparation Stage

The first stage involved the preparation phase, which began with the distribution of questionnaires to the participants. The graphical distribution results indicated that out of a total of 48 participants, 44 participants (91.7%) responded "Yes" to the question regarding their understanding of digital marketing and the role of artificial intelligence (AI) prior to the training. Only 4 participants (8.3%) responded "No" or provided unclear responses. This data suggests that the majority of participants already possessed a preliminary understanding of the basic concepts of digital marketing and AI technology. However, this high percentage does not necessarily reflect the depth or level of their readiness to apply AI in practical contexts. The percentage serves as an initial baseline, which is essential for comparison with post-training data to evaluate the extent to which the training enhances participants' readiness and competencies.

Subsequently, participants were trained to utilize AI-based tools to generate captions or promotional narratives in multiple languages, which can be tailored to a broader audience segmentation, including international markets. By leveraging this technology, participants are able to optimize brand communication across various social media platforms more effectively

and efficiently, without being constrained by language barriers or limited persuasive writing skills.

Implementation Stage

The second stage of this community engagement program was the implementation phase, which involved conducting AI-based copywriting training for participants at the Magelang City Job Training Center (BLK). This training encouraged participants to begin considering strategic approaches to utilizing AI, even though some were still in the exploratory phase of idea development. The impact of the training was evident not only in the participants' improved theoretical understanding but also in their emerging readiness to formulate contextually relevant applications of AI within their respective businesses.

Based on participants' responses to questions regarding simple plans they intended to implement using artificial intelligence (AI) to market their products or services, a variety of applicable ideas were identified reflecting both a foundational understanding and genuine interest in leveraging technology within marketing contexts. Most participants mentioned the use of AI for creating visual promotional materials, such as pamphlets, logos, or social media content. For example, one participant wrote, "Designing a logo for my business name," while another stated, "Creating a pamphlet for my booth." These responses indicate that AI is increasingly being perceived as a creative tool to support visual identity and product branding.

In addition, several participants planned to use AI for product development and business strategy formulation, as reflected in statements such as "Creating new recipes and flavor innovations" and "I will start a beverage business and market it with the help of AI." Meanwhile, some participants provided more general responses, such as "Marketing products using AI methods" or "Using AI to promote my products," which suggest an initial yet still abstract understanding demonstrating early-stage awareness with potential for further growth and practical application.



Figure 2. Copywriting Training Socialization Session

Source: Author's documentation

The socialization session was conducted by lecturers from the Faculty of Languages, Universitas Negeri Semarang, in collaboration with instructors from the Magelang City Job Training Center (BLK). During this session, participants were introduced to the fundamental concepts of copywriting using ChatGPT and how this technique can be applied to create effective, engaging, and persuasive marketing content. The instructors emphasized the importance of precise writing skills in capturing audience attention within the fast-paced digital landscape. Participants were also provided with insights into the role of copywriting in expanding market reach, particularly within the context of multilingual AI-based digital marketing.

Rather than being limited to theoretical materials, this session provided participants with hands-on practice in applying copywriting techniques through ChatGPT using their mobile phones. Each participant had the opportunity to create marketing content directly on their devices. They were guided on how to craft social media copy, such as Instagram captions, using appropriate techniques. The instructors offered step-by-step guidance on how to adapt marketing messages to the characteristics of each digital platform and its target audience.

Through this session, participants not only gained theoretical knowledge about copywriting but also acquired practical skills that can be immediately applied in their daily marketing activities. This hands-on practice aimed to strengthen participants' understanding of how to use compelling language and effective communication strategies to optimize the impact of their marketing messages in the digital environment.



Figure 3. Training Evaluation Chart

Source: Author's documentation

The bar chart above illustrates participants' readiness to integrate artificial intelligence (AI) after completing the training. The program demonstrated a significant impact on increasing participants' confidence and preparedness. Out of a total of 48 participants, 29 individuals (60.4%) reported a readiness level of 4 on a 1–5 scale, indicating that they felt fairly ready to begin implementing AI in their marketing strategies. Meanwhile, 12

participants (25%) selected the highest readiness level of 5, reflecting full confidence and readiness to actively integrate AI technology into their marketing activities. The remaining 7 participants (14.6%) rated their readiness at level 3, showing that they had developed a foundational understanding and basic preparedness, although they still required further guidance.

Interestingly, no participants selected readiness levels 1 or 2, meaning that all participants felt at least moderately ready (score ≥ 3) after attending the training. These findings indicate that the training effectively enhanced participants' understanding not only theoretically but also practically, enabling them to adopt and utilize AI in their marketing strategies. With a total of 85.4% of participants choosing scores 4 and 5, it can be concluded that the training was effective in improving digital competence and fostering readiness to face technology-driven marketing challenges.

The training also encouraged participants to begin considering strategic steps in utilizing AI, although some were still in the exploratory phase of idea development. This was reflected not only in their increased theoretical understanding but also in their emerging readiness to formulate contextual applications of AI within their respective businesses. Based on participants' responses to the question regarding simple plans they intended to implement using AI to market their products or services, a range of applicable ideas emerged demonstrating both foundational understanding and a growing interest in adopting technology for marketing purposes. Most participants mentioned using AI to create visual promotional materials such as pamphlets, logos, or social media content. For example, one participant stated, "Designing a logo for my business name," and another mentioned, "Creating a pamphlet for my booth." These responses show that AI is increasingly perceived as a creative tool to support visual identity and product branding.

Additionally, some participants planned to use AI for product development and business strategy formulation, as reflected in responses like "Creating new recipes and flavor innovations" or "I will start a beverage business and market it with the help of AI." Meanwhile, a few participants provided more general responses such as "Marketing products using AI methods" or "Using AI to introduce my products," which indicate an initial but still developing understanding showing potential for future growth in practical AI utilization.

CONCLUSION

The implementation of the community service program at the Magelang City Job Training Center (UPT BLK Kota Magelang) successfully achieved its primary objective of improving participants' ability to utilize AI technology for digital marketing purposes. Based on the training outcomes and evaluation results, participants demonstrated significant improvement in their understanding and skills in applying AI technologies particularly within the context of multilingual marketing, which is crucial for enhancing the competitiveness of micro, small, and medium enterprises (MSMEs) in the global market.

Overall, the training effectively strengthened participants' digital competencies, especially in developing relevant and engaging marketing content using AI tools. Consequently, this community service program is expected to help MSMEs become better

prepared to face global market challenges, enhance their product competitiveness, and expand their market reach through more effective AI-assisted multilingual digital marketing strategies.

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