

Business improvement through artificial intelligence-based digital marketing driven mapping skills at UKM JAMARIS

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ABSTRACT

This community service activity aims to increase the independence of the creative industry through Artificial Intelligence (AI)-driven digital transformation and skill mapping for the JAMARIS SME in Jatijajar Village. This SME, which operates in the creative sector, often struggles to maximize its business potential and compete in an increasingly digital market. Therefore, this training is designed to introduce AI technology and skill mapping as tools for more efficient business planning and management. Through this training, participants are equipped with basic skills in AI, including how to map existing skills within an organization and utilize data for more informed decision-making. After participating in the training, participants showed significant progress in mastering digital technology, with 85 percent of them able to utilize AI for market analysis and design more effective business strategies. In addition, 75 percent of SMEs reported increased efficiency in business management. The results of this activity indicate that AI-based digital transformation can strengthen SME competitiveness, increase productivity, and open up new opportunities for innovation in the creative industry of Jatijajar Village SMEs.

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1. INTRODUCTION

Jatijajar Village, located in Bergas District, Semarang Regency, Central Java, is known for its beautiful natural scenery and cool air due to its location at an altitude of 500-600 meters above sea level. The village is divided into five hamlets: Krajan, Saren, Begajah, Senden, and Kebonan. Jatijajar Village is located in Bergas District, Semarang Regency, Central Java. This village has significant economic potential, especially in the agriculture, plantation, home industry, and nature tourism sectors.

According to data Ministry of Cooperatives and SMEs (2023), the number of MSMEs in Jatijajar Village is around 150 business units, classified as follows: (1) Culinary Sector (30 percent), production

of snacks, regional food specialties, and food stalls; (2) Handicraft Sector (25 percent), production of souvenirs, bamboo weaving, and local batik; (3) Agriculture & Plantation Sector (35 percent), agricultural and plantation businesses such as vegetables, fruits, and spices; (4) Services and Other Sector (10 percent), includes repair services, small garment factories, and general trade. However, many of these businesses still operate traditionally and have not yet optimally utilized digital technology. This has limited their ability to reach a wider market and increase the competitiveness of their products.

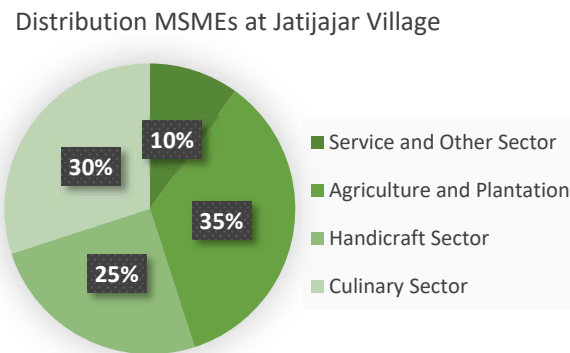


Figure 1. Diagram of distribution MSMEs at Jatijajar Village

The target partners for this program are JAMARIS SMEs, a micro and medium enterprise association located in Jatijajar Village with approximately 25 members. According to an interview with the Head of JAMARIS SMEs, Mr. Sugeng, on March 28, 2025, JAMARIS SMEs faced several challenges. Currently, Mitra Jamaris, which manages several MSME products, still uses very conventional promotional and marketing methods. These methods include direct promotion to local consumers, such as in traditional markets and brick-and-mortar stores, as well as through local exhibitions and community events. While effective in reaching consumers within a limited radius, these methods have limitations in expanding the market.

The potential of the global market is highly relevant, especially for MSME products with local and unique value, such as regional specialties, handicrafts, and other locally-based products. The existence of e-commerce platforms like Tokopedia, Bukalapak, or even Shopee, which already have active user ecosystems, opens up significant opportunities for Jamaris Partners to introduce their products to a larger and more diverse market. Furthermore, implementing e-commerce can also open up opportunities for collaboration with other brands or larger distributors. However, this larger market potential will not be optimally realized without the right systems, such as stock management, efficient shipping, and secure payment systems. These are challenges that must be addressed in implementing e-commerce (Harlina et al., 2025).

One potential obstacle to implementing e-commerce is limited production capacity. Currently, many of Mitra Jamaris's MSME products are produced manually or on a small scale. Some products, particularly in the culinary and handicraft sectors, are made in limited quantities and use volatile raw materials. If e-commerce is implemented and demand surges from the broader market, significant challenges arise in production capacity. Predominantly manual production will undoubtedly struggle to meet increased demand. For example, food products or handicrafts previously produced in limited quantities for the local market will struggle to scale up without improvements or increased production capacity.

However, with e-commerce, Mitra Jamaris can more easily monitor demand trends and better predict market needs. This presents an opportunity to increase production capacity, either by increasing the workforce or, better yet, by adopting technology that supports production efficiency.

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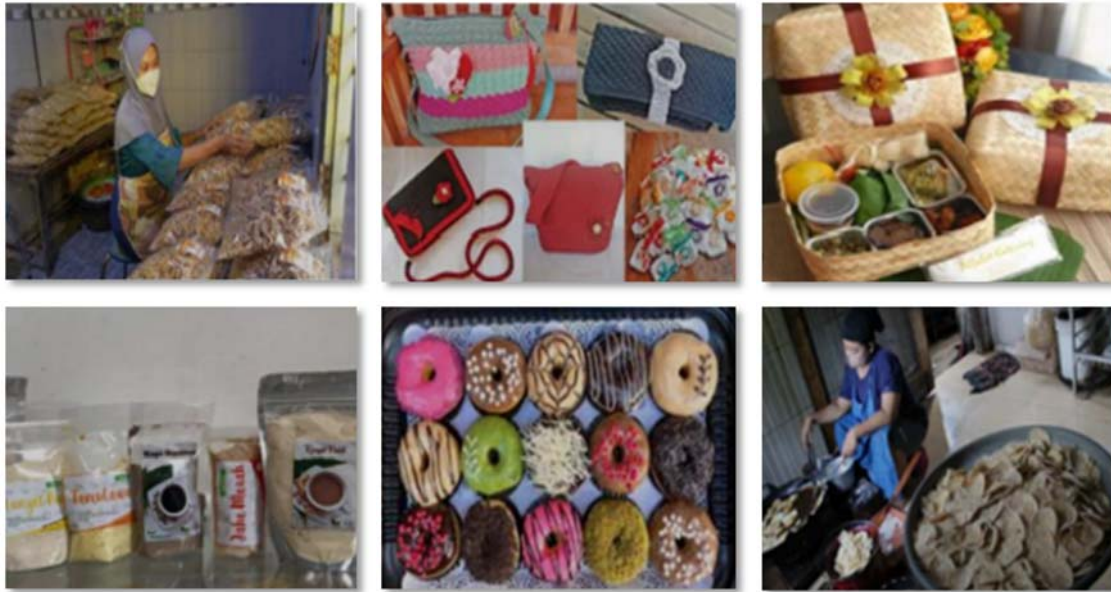


Figure 2. UKM JAMARIS Product: (a) Mushroom chips; (b) Kitting crafts; (c) Snack and catering; (d) Herbal drink; (e) Donuts; (f) Tempe chips

Based on the analysis above, it is evident that MSMEs in Jatijajar Village still face significant limitations in business digitalization, with the primary challenge being their limited market reach. Without a more efficient and wider platform, their products are unable to penetrate larger markets, both nationally and internationally, which in turn restricts sales growth and economic development. Therefore, the implementation of e-commerce is highly relevant to assist Jamaris Partners in overcoming these barriers and accessing greater market potential. Enhancing economic independence through technological support and digital training enables MSMEs to operate more autonomously without relying solely on traditional markets (Singgih, 2007). Through this community service program, MSMEs in Jatijajar Village are expected to transform into more modern and competitive enterprises at both regional and national levels. The objective of this initiative is to accelerate the digital transformation of MSMEs in Jatijajar Village by utilizing AI-driven skill mapping as a key strategy to enhance competitiveness and strengthen economic independence (Hadi et al., 2022).

Mitra Jamaris faces several challenges related to limited marketing reach, production capacity constraints, and fluctuations in raw material availability. The proposed solutions include implementing e-commerce effectively by developing adequate technological infrastructure and utilizing platforms such as Tokopedia, Bukalapak, or Shopee as primary marketing channels; optimizing digital marketing strategies through the use of e-commerce, social media, and AI-based marketing tools; developing an AI-driven skill mapping system to analyze MSME skill requirements and enhance business capacity more precisely; and increasing efficiency and productivity by integrating digital technology into production and distribution processes. These efforts are expected to support the creation of a digital-based economic ecosystem that promotes sustainable community economic independence in Jatijajar Village. A study by (Suria et al., 2025) highlights the importance of technological adaptation in enhancing the competitiveness of MSME products in the digital marketplace.

This community service program aims to This initiative will have a broad and sustainable impact on the Jatijajar Village community as a whole, both socially and economically. The social impact is to

increase digital literacy and technological awareness among the village community, especially MSMEs. The community will become more technologically literate and encouraged to start using digital devices in their daily lives. The economic impact of this activity includes increasing the income of MSMEs. Through digital transformation and appropriate skills mapping, MSMEs can improve production efficiency, expand markets, and increase sales, which will directly impact family income. To identify the basic digital skills and needs of each MSME (Marolt et al., 2025). The purpose of the outreach program is to build two-way communication so that MSMEs feel involved and willing to actively participate throughout the program.

2. METHODS

Activity Plan

Based on the analysis above, it is evident that MSMEs in Jatijajar Village still face significant limitations in business digitalization, with the primary challenge being their limited market reach. Without a more efficient and wider platform, their products are unable to penetrate larger markets, both nationally and internationally, which in turn restricts sales growth and economic development. Therefore, the implementation of e-commerce is highly relevant to assist Jamaris Partners in overcoming these barriers and accessing greater market potential. Enhancing economic independence through technological support and digital training enables MSMEs to operate more autonomously without relying solely on traditional markets (Suria et al., 2025). Through this community service program, MSMEs in Jatijajar Village are expected to transform into more modern and competitive enterprises at both regional and national levels. The objective of this initiative is to accelerate the digital transformation of MSMEs in Jatijajar Village by utilizing AI-driven skill mapping as a key strategy to enhance competitiveness and strengthen economic independence (Koporcic et al., 2025).

Digital literacy and business management training

The purpose of digital literacy and business management training is to improve Partners' understanding of the use of digital technology to support their business operations and management, both internally (stock management, financial management) and externally (online marketing). The activity plan includes: (1) Introduction to Digital Technology Training, which will teach Partners the basics of using technology relevant to their business, such as the use of digital-based business management tools (e.g., applications for bookkeeping, inventory management, and financial analysis); (2) Business Management Workshop, which will introduce digital business management concepts, including time management strategies, stock management, ordering systems, and digital application integration for operational efficiency; (3) Case Study: Analysis of real case studies of MSMEs that have successfully implemented digital-based business management. This activity is expected to provide practical insight into the importance of a good management system in supporting business success.

Digital marketing training

The purpose of digital marketing training is to improve Partners' ability to market their products online through various e-commerce and social media platforms with appropriate strategies, while optimizing broader market potential. The activities planned include: (1) Marketing Training on E-commerce Platforms. This training will guide Partners in opening stores on e-commerce platforms, managing products, setting prices, and understanding payment and shipping systems; (2) Social Media Marketing: training on using social media (Instagram, Facebook, WhatsApp Business) to promote products, including

creating creative content, using paid advertising, and managing social media marketing campaigns; (3) SEO and Digital Ads: an introduction to the basics of SEO (Search Engine Optimization) and marketing through digital advertising (Google Ads, Facebook Ads) to increase product visibility online; (4) Market Analysis: training to understand how to analyze consumer data and market trends using tools such as Google Analytics or analytics features on social media platforms.

Skill mapping

The purpose of skill mapping training is to identify the skills possessed by each Partner and guide them in developing relevant capabilities to increase product efficiency and competitiveness in the e-commerce market. The activity plan includes: (1) Initial Skills Evaluation: Partners will be asked to take a test or interview to assess their current digital and managerial skills; (2) Digital Skills Mapping: helping SMEs identify skills that need improvement, such as the use of software for online store management, digital marketing skills, and market analysis capabilities; (3) Needs-Based Training: training programs will be tailored to individual needs, such as advanced training in social media management, e-commerce store management, or sales data analysis; (4) Individual Mentoring: Partners will be provided with regular mentoring to ensure they can implement the skills they have learned.

Implementation Method

The approach used is Participatory Action Research (PAR). This approach emphasizes active partner participation throughout the entire activity process: from problem identification and solution design, implementation, and evaluation. Partners are not merely objects but also subjects of the activity (Hills et al., 2007). The methods used in digital literacy and business management training activities include direct and interactive teaching using multimedia-based training materials, simulations, and hands-on practice using relevant software applications.

The methods used in this digital marketing training activity include material presentations and interactive discussions. Hands-on practice demonstrates how to manage an online store and social media campaigns, as well as evaluation and feedback on the partner's digital marketing performance. Technology implementation activities include: Use of financial applications and digital business management by MSMEs. Installation and use of a simple AI system (based on spreadsheets and machine learning recommendations) for market analysis, namely understanding consumer trends and needs through data analytics. Furthermore, understanding Digital Marketing: Increasing marketing reach through online platforms and social media. Finally, Process Automation: Improving operational efficiency through the automation of routine tasks (Mardiana et al., 2024). The methods used in Skill Mapping activities are interviews and skills tests for initial ability mapping, training sessions according to the skills needs that have been mapped as well as periodic evaluations and mentoring to support Partner skills development. Human-Centered Design (HCD), Each intervention and technology used is designed according to the actual conditions, capabilities, and local characteristics of MSMEs (Vaughn & Jacquez, 2020).

To ensure the success of the digital technology-based creative industry development activities at the JAMARIS SME in Jatijajar Village, regular monitoring and evaluation are conducted. Monitoring is conducted to ensure that community service activities are proceeding according to established plans and objectives. This monitoring method includes monitoring the progress of various aspects of the activity, such as the implementation of AI-based skills mapping and digital training provided to participants. The monitored aspects are training schedule achievement, namely monitoring whether the training is

carried out on time according to the established plan. After monitoring, the next step is evaluation, which aims to assess the extent to which program objectives have been achieved and the impact felt by participants. This evaluation serves to determine the success of the training, changes in participants' skills, and its impact on SME business development. Evaluation is conducted qualitatively and quantitatively, measuring several key indicators, such as improved digital skills: Evaluation is conducted by measuring the extent to which participants can apply the digital skills they have learned.

Schedule and stages of program implementation

Table 1. Stages of activity implementation

Activity		Time
1st Activity: Initial Survey		
Activities	Discuss Cultivation Issues and potential solution with partners.	The first week of August 2025
Goal	The goal is to be able to identify the potential, solution to the problems digital marketing, business management and challenges faced by partners.	
2nd Activity: Site Survey		
Activities	Joint discussion with JAMARIS UKM partners to determine the location for digital marketing and business management training and practice.	The second week of July 2025
Goal	An agreement was reached on the location of the training and practice to be carried out, namely at the Jatijajar Village Hall.	
3rd Activity: Training and practice digital marketing, Product development, HR and Business Management		
Activities	Providing AI-based digital marketing training, product development, HR and also business management related to digital-based financial management.	The third week of August and September 2025
Goal	Increasing the knowledge and skills of JAMARIS SMEs in the marketing sector, managing finances, human resources and also production development.	
4th Activity: Monitoring and evaluation		
Activities	Check and see the progress of the training and practice process that has been given to UKM JAMARIS, whether there are any problems or difficulties in carrying out the practice or not.	The last week October 2025
Goal	Find out how far JAMARIS UKM has progressed	

3. RESULTS AND DISCUSSION

Results

Initial survey and site survey

Community Empowerment Activities are carried out in several stages, namely our socialization activities were held on August 22, 2025 by presenting village administrators consisting of the Village Head, Village secretary, head of Bumdes, Head of UKM Jamaris along with 10 JAMARIS UKM administrators. After the socialization activities the next day we immediately held training activities on the 23rd which contained Digital Marketing Training based on artificial Intelligence driven Mapping skills, Resource Management Training and also Product Development Training.



Figure 3. Socialization activities

Training and practice

This community service activity began with an introductory presentation on the goals and benefits of Artificial Intelligence (AI)-based digital transformation for the creative industry, specifically for the JAMARIS SME in Jatijajar Village. This presentation aimed to provide participants with an understanding of the importance of digital technology in increasing the efficiency and competitiveness of their products in the market.

During the presentation, the facilitator explained AI-based skills mapping, which is the first step in this digital transformation process. Skills mapping aims to identify the strengths and weaknesses of each SME member in product design, business management, and digital marketing. The facilitator also illustrated how AI can be used to simplify and accelerate the product design process and increase the effectiveness of marketing strategies through integrated data.

In the digital marketing session, participants were introduced to the use of social media platforms like Instagram, Facebook, and WhatsApp Business for product promotion, engaging content creation, and simple product photography techniques using AI. Furthermore, the hygiene food session focused on hygiene standards, from equipment sanitation and raw material storage to safe and attractive packaging. Participants were even invited to participate in a simulation to practice the techniques.



Figure 4. Training activities: (a) Digital marketing; (b) Human resource development; (c) Development product

The HR management session discussed the importance of organizational structure in MSMEs, clear division of tasks, and healthy team communication. The training was interactive, featuring discussions, questions and answers, and participants shared their firsthand experiences regarding the challenges they face in running their businesses. Through this training, they began to understand how to reach a wider market through digital technology. The results of this training are expected to increase the confidence of MSMEs in Jatijajar Village in marketing their products digitally, maintaining product quality

through hygiene standards, and building a solid work team. This activity provided not only theoretical insight but also practical experience that MSMEs can immediately implement. Furthermore, support from universities, the village government, and the MSME community was provided (Marolt et al., 2025).

After the initial presentation, the next activity was designing a creative product based on AI technology. In this session, participants were invited to practice using AI-based design applications that can help them create product prototypes more quickly and efficiently. The following are the stages of the design planning session: (1) Theme Selection and Product Design. Each participant was given the freedom to choose a product design theme relevant to their creative industry. This theme should reflect the local characteristics of Jatijajar Village and have broad market potential. The facilitator provided guidance on AI-based design applications, such as Canva AI or Adobe Sensei, to facilitate participants' design creation; (2) Implementation of AI in Product Design. Participants were then asked to use an AI-based design application to create a digital prototype of their product. This application allows participants to quickly conduct various design experiments and optimize the product's visual elements according to market trends. The Figure 5 shows an example of a product design produced by a participant using an AI-based application.



Figure 5. JAMARIS UKM product design prototype using AI-based applications.
(a) Mushroom chips; (b) Jamu; (c) Tempeh chips; (d) Donuts

After the initial prototype was completed, participants received reviews and feedback from the facilitator and fellow participants. This process aimed to improve the quality of the product design by incorporating suggestions and constructive criticism from various perspectives.

Monitoring and evaluation

After the product design was created, a review session was crucial to ensure that the resulting product met market expectations. The facilitator provided input on the aesthetic elements, function, and market appeal of the design. The facilitator and participants reviewed the prototype designs. Some questions used in this session were: whether the product design attracted the attention of target consumers, whether the visual elements used matched the characteristics of the product being marketed, and whether the design reflected the local characteristics of Jatijajar Village. The table below illustrates the results of the product design evaluation based on aesthetic criteria and market appeal, measured after the review session. The table below illustrates the results of the product design evaluation based on aesthetic criteria and market appeal measured after the review session.

After revisions, participants showcased their designs in a display in the training room. Each product was displayed with a brief explanation of the creative process used and how it met market needs. During this community service activity, various training materials were presented to provide a deeper understanding of the use of AI in the creative industry. The materials taught included Artificial

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Intelligence (AI) Fundamentals, where participants were introduced to the basic concepts of AI and how it can be used in creative processes such as product design and market analysis. Furthermore, there was material on Digital Marketing for SMEs, which provided an understanding of the importance of utilizing social media and digital platforms for product marketing (Panggiarti & Setyawan, 2019). Participants were taught how to use SEO, social media, and Google Analytics to increase their product visibility in the market. Finally, there was the AI Skills Mapping material. In this material, participants were taught how to use AI-based applications to map their skills in design, marketing, and business management, and how this technology can optimize their business performance. Some of the results we observed during the training activities.

Table 2. Product design evaluation based on aesthetic criteria and market appeal

Evaluation Criteria	Design Herbal Drink	Design Handicraft	Design Snack and Catering
Aesthetical	Good	Quite Good	Very Good
Market appeal	Currently	Good	Very Good
Conformity to Local Character	Quite Good	Good	Very Good
Innovation in Design	Good	Quite Good	Good

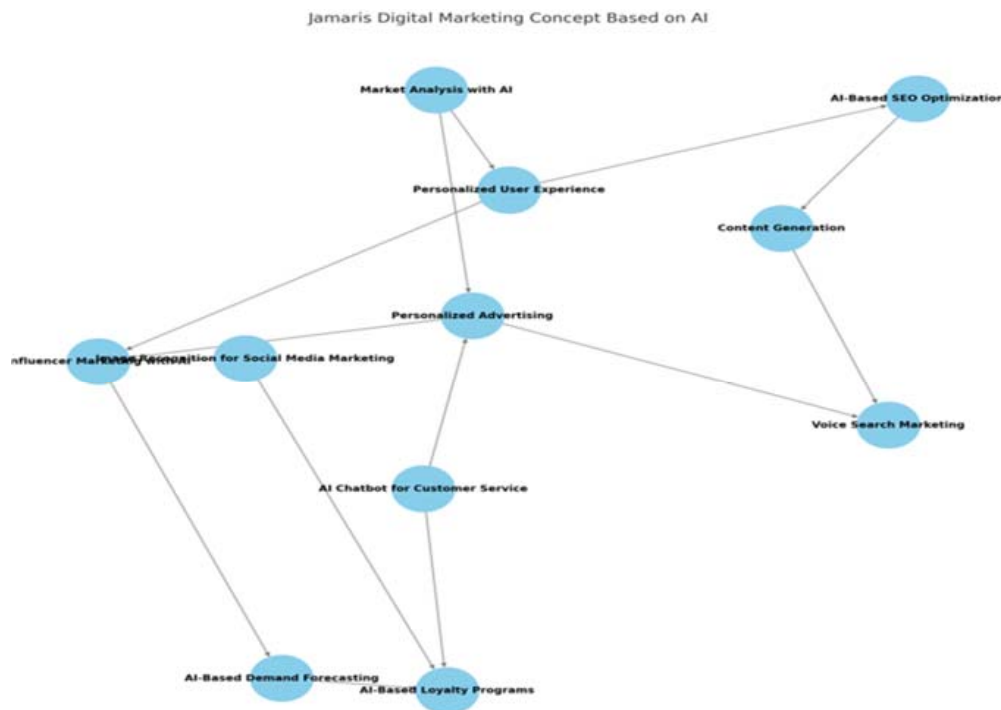


Figure 6. Jamaris digital marketing concept based on AI

Based on the pre-test results, which showed that JAMARIS SME owners in Jatijajar Village only had 45 percent knowledge regarding digital marketing, hygienic product management, product development, and HR management, it can be seen that there is still a significant gap in their understanding of the important aspects of running an SME effectively in the digital era. However, after the training, there was a significant improvement, with the understanding percentage increasing to 86.5 percent.

Table 3. Assessment indicators

Rated Aspect	Indicator	Pre-Test	Post-Test
Digital Marketing Knowledge	Ability to create marketing campaigns on social media, use digital advertising, and understand the basics of SEO and online marketing.	10%	20.12%
Hygienic Product Management Knowledge	Ability to implement hygiene procedures in production, packaging according to standards, and maintaining hygienic product quality.	15%	17.60%
Product Development Knowledge	Ability to plan and implement product development based on market research and consumer feedback.	10%	22.23%
Human Resource Management Knowledge	The ability to recruit, train, and manage employees to increase productivity and job satisfaction.	5%	10.15%
Human Resource Management Knowledge	Improved overall understanding of aspects of digital marketing, product management, product development, and HR management.	5%	16.40%
Total Pre-test & Post-test		45%	86.5%

From the Table 2 this improvement illustrates that digital technology and AI-based training programs can bring significant changes to SME owners in managing their businesses. After participating in the training, participants showed significant progress in mastering digital technology, with 85 percent of them able to utilize AI for market analysis and design more effective business strategies. In addition, 75 percent of SMEs reported increased efficiency in business management. The results of this activity indicate that AI-based digital transformation can strengthen SME competitiveness, increase productivity, and open up new opportunities for innovation in the creative industry of Jatijajar Village SMEs.

Table 4. Indicator of market analysis & business management

Aspect	Pre-Test	Post-Test	Indicator
Using AI for Market Analysis	40%	85%	Participants' ability to use AI technology to analyze market trends, identify opportunities, and design more effective business strategies.
Efficiency in Business Management	35%	75%	Increased efficiency in resource management, planning, and business operations after training, with more effective use of technology and management methods.

This improvement can be examined through several theories that underpin learning and technology adoption in SME management, particularly in the context of product mapping using digital technology based on Artificial Intelligence (AI). [Vechakul et al. \(2015\)](#) emphasizes that practical experience is essential for effective learning. In this training, SMEs not only received theoretical knowledge but were also given the opportunity to practice using AI technology to map their products. This hands-on experience enabled them to link the concepts learned with real-life situations, thereby enhancing understanding and knowledge retention. According to [Manza \(2025\)](#), successful change requires deep comprehension and acceptance from individuals involved. The increased knowledge among SME participants regarding digital marketing, hygienic product management, and human resource development after the training indicates that they have successfully internalized the change process and are now better equipped to face challenges in an increasingly competitive and technology-driven market. [Khaq et al. \(2024\)](#) further

explains that the adoption of new technology within a community follows several stages, knowledge, persuasion, decision, implementation, and confirmation. The significant progress shown by JAMARIS SMEs demonstrates that they have successfully passed through these stages and adopted AI-based product mapping.

Following the training, JAMARIS SME participants were able to map their products more effectively using AI-driven skill mapping. This included identifying top-selling products in the market, categorizing products based on specific characteristics, and utilizing digital tools to enhance product visibility and distribution in online marketplaces (Soraya et al., 2024). By leveraging market data and consumer preferences analyzed through AI, SMEs can determine which products have high demand and which require further development. With AI-based analytical tools, they are able to adapt more quickly to market needs. The technology also enabled participants to map product quality and ensure compliance with better hygiene standards, which not only enhanced product competitiveness but also improved consumer trust (Manza, 2025).

Building on the success of the initial training, the program plans to conduct follow-up sessions to ensure continuous improvement, focusing on more advanced topics related to digitalization and the use of AI technology. These advanced sessions will cover areas such as the use of AI-driven data analytics to interpret market trends and consumer behavior, more sophisticated digital marketing techniques such as search engine optimization and data-driven promotion strategies, as well as the application of AI for business automation, including product inventory management and customer service systems such as chatbots. To ensure long-term sustainability and success for JAMARIS SMEs, it is essential to expand their product marketing networks. Therefore, a key sustainability strategy is to establish collaborations with multiple stakeholders, including government agencies, educational institutions, and private-sector partners, to support continuous innovation and strengthen the digital ecosystem that empowers local SMEs.

Discussion

This activity aims to improve the capabilities and efficiency of Jamaris' small and medium-sized enterprises (SMEs) through the application of digital technology, particularly in artificial intelligence (AI)-based digital marketing. By leveraging AI in digital marketing, Jamaris SMEs are expected to improve their marketing strategies and increase the competitiveness of their products in both local and international markets.

Through training and the implementation of AI technology in digital marketing, participants (MSME owners) learn to use advanced tools that can improve their marketing effectiveness, such as using AI for market analysis, consumer segmentation, and more efficient marketing planning and strategy creation. Furthermore, this activity also provides participants with an understanding of how to optimize e-commerce platforms to reach a wider market and significantly increase sales.

The implementation of Artificial Intelligence-based Digital Marketing can have various positive impacts for Jamaris Partners, both in terms of business operations and increasing product competitiveness. Some of the positive impacts obtained include digital technology and AI-based marketing, allowing JAMARIS SMEs to gain a deeper understanding of how to use digital platforms, data analytics, and technology-based marketing strategies. This increased capability enables them to compete more effectively in an increasingly digital market. By using AI-based marketing tools, Jamaris Partners SMEs can identify and target consumers more efficiently. The AI system enables deeper data analysis to predict market trends and consumer preferences. As a result, marketing activities become more targeted and generate higher conversions.

The use of an e-commerce platform combined with AI gives Jamaris Partners access to a wider market. Previously, their products may have been limited to the local market. However, with improved digital marketing capabilities, Jamaris Partners' MSME products can now reach consumers from various regions, even internationally. The implementation of more efficient and effective digital marketing has resulted in increased product competitiveness. This directly impacts increased revenue generated from more targeted product sales and increased through e-commerce channels.

To measure the impact of the application of digital technology, especially AI in marketing and the use of e-commerce, quantitative indicators that can be used are Sales Increase (Revenue Growth). Before the training, the average sales of Jamaris Partner products through e-commerce were at 10,000,000 IDR per month. After the training and implementation of AI-based digital marketing, sales increased to 20,000,000. Increased sales through e-commerce channels, which indicates the effectiveness of AI-based marketing strategies in expanding the market and increasing sales volume. Increased Operational Efficiency Before the training, the time required to process an order, from payment to delivery, was 2 hours. After the training and the use of digital technology in order management, the processing time was reduced to 1 hour. The reduction in order processing time indicates an increase in operational efficiency thanks to the use of an automated system driven by digital technology.

4. CONCLUSION AND RECOMMENDATIONS

This program has successfully enhanced the digital capabilities of JAMARIS SMEs through the adoption of AI-based technology for skill mapping and product marketing. Their understanding of digitalization, product marketing, and HR management increased from 45 percent before the training to 86.5 percent afterward, with 85 percent of participants able to use AI for market analysis and strategic decision-making, and 75 percent reporting improved business efficiency. These results show that AI-driven digital transformation strengthens SME competitiveness, boosts productivity, and opens new opportunities for innovation in the creative industry of Jatijajar Village. Overall, SMEs are now better prepared to adopt digital technology for managing and marketing their products, supported by practical skills in AI utilization and expanded market reach through e-commerce. Nevertheless, technical, logistical, and financial challenges must be anticipated to ensure that the positive impacts of this program can be maximized and sustained.

It is recommended that this program be continued through more advanced training on digitalization and AI applications in SME development, covering topics such as big data management, business automation, and advanced analytical tools. Strengthening collaborations with educational institutions, government agencies, and technology companies is also essential to provide SMEs with greater access to resources, including capital, technology, and wider marketing networks. To sustain the program's impact, a long-term coaching and mentoring system is needed to support SMEs in implementing digital marketing strategies and operating AI tools effectively. Such mentoring is crucial to help SMEs address post-training challenges, including limited infrastructure and difficulties in using new technology.

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