

IMPLEMENTATION OF E-COMMERCE WEBSITE TO IMPROVE MARKETING OF MSMEs PRODUCTS: A CASE STUDY OF KEMANG VILLAGE, CIANJUR REGENCY

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Abstract

The development of digital technology provides opportunities for MSMEs to expand their markets through e-commerce platforms. However, in Kemang Village, Cianjur Regency, many MSMEs still rely on conventional marketing, limiting their reach. This study aims to implement an e-commerce website to improve the marketing of MSME products in Kemang Village. The method used was a qualitative approach with the stages of needs analysis, system design, website development, and evaluation. The results show that the developed e-commerce website can help MSMEs promote their products online, increase visibility, and facilitate transactions with consumers. With this platform, it is hoped that MSMEs in Kemang Village can compete in the digital market and increase their income.

Keywords: Website, E-commerce, MSMEs, Digital Marketing, Kemang Village

A. INTRODUCTION

The Cianjur Regency Government is actively promoting the digitalization of MSMEs as a strategy to increase the competitiveness of local products (Damayanti, Zainsyah, Nurfitriana, Adisasmito, & Darliana, 2024). One form of intervention is the launch of a digital MSME portal and training in branding, licensing, and digital-based marketing through e-commerce delivered through a collaboration between the government, universities, and BUMDes (Village-Owned Enterprises) (Hidayat et al., 2023). For example, PKM UNPI Cianjur has launched a dedicated website for village MSMEs as part of an effort to scale up from micro to growing businesses (upgrade) (Viana, Adikuncoro, & Jamilah, 2025). However, the success of this transformation is highly dependent on the readiness of human resources, the availability of internet infrastructure, and institutional support at the village level (Hatala & Latuconsina, 2023).

Data shows that approximately 79% of MSMEs in West Java are not yet digitally literate and still use traditional marketing methods, such as direct sales and local markets (Pinem, Pusporini, & Masnuna, 2022). In many villages, low digital literacy and poor internet access are major barriers to technology adoption. Some MSMEs are unfamiliar with conducting online transactions or promoting products via social media due to limited technical knowledge and connectivity. This prevents most MSMEs from optimally utilizing the potential of e-commerce to expand market reach and improve business efficiency (Anam & Yosepha, 2024).

In many rural areas of West Java, including Cianjur Regency, a variety of quality local products, from culinary specialties to agricultural crafts, boast high market value (Falah, Setiadin, Ritonga, Sabrian, & Afit, 2021). However, many of these products are still only

marketed locally due to a lack of digital exposure and professional branding. However, the adoption of digital marketing and marketplaces can increase opportunities for national and even international market access. The gap between local product potential and digital exposure poses the risk of local economic stagnation and limited improvements in the welfare of business actors (Prabandari, Yulianti, & Barinta, 2024).

Although various MSME digitalization programs have been implemented in Cianjur Regency, most interventions remain sporadic and have not been systematically managed (Wibawa, Murti, Masruchiyah, Sulistyaningsih, & Slamet, 2024). In many cases, digital initiatives such as community websites, branding training, and online mentoring only reach select villages and are not sustainable. This situation results in a disconnect between macro policies and the reality of needs at the village level (Aromatica et al., 2024). In Kemang Village, for example, there is a strategic need for digital marketing integration, but there has never been a community-based e-commerce program focused on the village in a comprehensive manner. Suboptimal interventions in surrounding villages indicate that Kemang Village remains an area with great potential but very little digital exposure, making it important to identify this gap as a background for research.

In this village, local MSMEs still rely heavily on direct and traditional marketing channels, product visibility is low, and access to digital marketing is not yet systematically available. Limited internet infrastructure and low digital literacy levels mean that local culinary and agricultural potential has not been optimally explored. There have been no community-based interventions supporting the creation of e-commerce websites or comprehensive digital integration. This creates a gap between the potential of the digital-based economy and the local reality of Kemang Village. Therefore, this research is relevant for introducing an appropriate integrated community e-commerce model.

Several previous studies have examined the role and challenges of e-commerce in the development of MSMEs. First, research by Harmayani et al. (2020) shows that the use of e-commerce can improve distribution efficiency and expand marketing networks. However, limited digital literacy remains a major obstacle for rural MSMEs. Second, research by Sengkey, Wenas, and Malonda (2022) highlights the importance of institutional and infrastructure support in encouraging the adoption of information technology by small businesses in rural areas. Third, Achmad and Jannah (2021) emphasize the importance of ongoing training and mentoring so that MSMEs not only utilize e-commerce technically but also develop sustainable digital marketing strategies.

The similarities between these three studies are the recognition of e-commerce's potential in increasing the competitiveness of MSMEs, while simultaneously emphasizing structural barriers and the capacity of business actors in the adoption process. The differences lie in the focus of their approaches: Harmayani et al. emphasize digital literacy, Sengkey et al. focus on the institutional ecosystem and infrastructure, while Achmad and Jannah highlight the training and capacity-building dimensions.

Based on this review, this research is original because it not only analyzes the challenges of MSME digitalization in the village but also directly implements solutions in the form of a community-based e-commerce website through community service activities integrated with an applied research approach. In other words, this research goes beyond problem analysis but also provides technology-based interventions that are contextually relevant to the socio-economic conditions of Kemang Village.

The urgency of this research lies in the need for a pilot implementation model that can be replicated in other villages, particularly in building digital literacy and online marketing capabilities among MSMEs based on local potential. This approach is also relevant to the national agenda of digital transformation and sustainable rural economic empowerment.

Based on this background, the purpose of this study is to analyze the challenges and opportunities for e-commerce utilization by MSMEs in Kemang Village, Cianjur Regency, with a focus on human resource readiness, digital infrastructure, and local institutional support. This study also aims to design and implement an e-commerce website as a community-based digital marketing tool that is adaptive to local conditions. Furthermore, this study seeks to evaluate the impact of website utilization on increasing product visibility, sales volume, and expanding MSME marketing networks in a measurable and sustainable manner.

B. LITERATURE REVIEW

E-Commerce and Digital Transformation

E-commerce (electronic commerce) is the process of buying, selling, transferring, or exchanging products, services, and information via computer networks, including the internet. Digital transformation itself refers to the comprehensive use of digital technology in business activities to create added value and efficiency (Rachmat et al., 2023). Indicators:

- Number of business actors using digital platforms
- Variety of e-commerce platforms used (marketplace, own website)
- Intensity of online transactions
- Integration of digital payment systems
- Changes in consumer behavior in purchasing

Digital Marketing

Digital marketing is a marketing activity that uses electronic devices or the internet to reach consumers with strategies such as SEO, social media, email marketing, and websites (Prasetyowati, Martha, & Indrawati, 2020). Indicators:

- Level of market accessibility online
- Traffic to MSME websites or digital platforms
- Consumer interaction and engagement
- Conversion from visitors to buyers
- Brand awareness in digital media

MSME Development

Micro, Small, and Medium Enterprises (MSMEs) are business units that meet specific criteria in terms of workforce, turnover, and assets, and play a significant role in job creation and economic equality (Munthe, Yarham, & Siregar, 2023). Indicators:

- Business scale (micro, small, medium).
- Access to capital and training.
- Production and distribution capacity.
- Technology adoption rate.
- The existence of a business network (business ecosystem).

Technology Adoption and Digital Literacy

Technology adoption is the process by which individuals or groups begin to use a technological innovation in their lives or businesses, as explained in Diffusion of Innovations. Digital literacy refers to an individual's ability to understand, use, and critically evaluate digital information (Putra, Windah, & Ana, 2021). Indicators:

- Level of access to digital devices.
- Ability to use the internet and applications.
- Attitude towards technology (positive/negative).
- The speed and penetration rate of technology adoption.
- Technical and social barriers to digitalization.

Technology-Based Community Service

Technology-based community service is a collaborative approach between universities and local communities to solve real-world problems by integrating technology-based solutions within an empowerment framework (Jati, Lokananta, Singgalen, & Kartikawangi, 2025). Indicators:

- Community involvement in the design and implementation process.
- Relevance of technological solutions to local needs.
- Level of community participation.
- Knowledge transfer and local capacity building.
- Post-implementation sustainability.

C. RESEARCH METHODOLOGY

This study uses a research design *mixed methods* To collect quantitative and qualitative data, according to Sugiyono (2011), the mixed method combines two research methods, namely quantitative and qualitative, into one research activity, so that the data obtained will be more comprehensive, valid, reliable, and objective. In this study, a case study research method was used. This research was applied using qualitative and quantitative approaches through several interactive stages. First, the team conducted participatory observation by directly involved in monitoring the MSME marketing process before and after the training to obtain a real picture of conventional marketing practices and the impact of the intervention. This was followed by semi-structured interviews using a 10-question guide, which aimed to explore marketing obstacles from the perspective of business actors. Live demonstrations were also held, in the form of practical training on creating e-commerce accounts, taking and uploading product photos, and order management. Evaluation was carried out quantitatively through questionnaires to measure the increase in participants' understanding before and after the training, as well as qualitative analysis through focus group discussions (FGDs) that explored technical obstacles such as limited internet connection and the level of readiness of MSME participants.

The first socialization was held on June 16, 2025, lasting two hours (10:00–12:00 WIB). E-commerce website practical mentoring was then conducted for two weeks following the socialization, with three meetings every Saturday, each lasting two hours. The entire series of activities was attended by 25 MSMEs in Kemang Village, consisting of micro and small business owners in various sectors, especially food processing and processed food. With this design, the study is expected to provide a comprehensive overview of the dynamics of digital learning for MSMEs and the direct impact of e-commerce website interventions on improving their digital skills and operations.

D. RESULTS & DISCUSSION

The Unfari KKN website was first introduced to the Kemang Village community through a seminar *e-commerce* organized by Group 1 of Al-Ghifari University Bandung on June 16, 2025. This platform was developed as a digital marketing solution for local MSMEs to overcome the challenges of declining sales experienced so far. Our data collection techniques included semi-structured interviews and participant observation with 25 local MSMEs, supported by live demonstrations, qualitative and quantitative evaluations, and focus group discussions. Furthermore, the data obtained was categorized in a frequency table to facilitate analysis.

1. Analysis of Marketing Conditions of MSMEs in Kemang Village

Based on the results of observations and in-depth interviews with the Head of BUMDES Wana Mukti, two main problems were identified:

- a. Increasingly Fierce Business Competition

MSMEs in Kemang Village must compete with other business actors offering similar products, both from within and outside the region.

b. Distribution and Sales Constraints

Lack of access to modern marketing causes limitations in reaching potential consumers.

Platform presence *website e-commerce* which was created by Al-Ghifari University students is expected to be an alternative media for:

- a. Expanding Market Reach
- b. Increase Sales Volume
- c. Building Local Product Branding



Figure 1. Implementation of E-Commerce Website Socialization

2. Results of the Activity Process Stages

The community service activities carried out are divided into several stages of activity, including:

a. Observation & Interview

According to a field survey in Kemang Village, there are Micro, Small, and Medium Enterprises (MSMEs) engaged in food production and food processing. In Kemang Village, farmers consolidate their production through the Wana Mukti Village-Owned Enterprise (BUMDES) as the primary marketing agency. The BUMDES acts as a distributor, delivering these commodities to markets in the urban area. However, several MSME groups also sell directly to the local community, albeit in limited volumes.

There is a policy that restricts farmers from selling their produce directly to other parties without going through the Wana Mukti Village-Owned Enterprise (BUMDES). This regulation aims to ensure product quality standards, optimize village income through BUMDES, and avoid price competition among farmers. However, this policy imposes limitations on farmers and could lead to a decrease in sales through BUMDES. Meanwhile, In this case, an interview is a form of language activity that uses a list of questions to gather necessary information from sources. During the KKN (Community Service Program), Group 1 conducted direct interviews with the head of the Village-Owned Enterprise (BUMDES) and several MSME groups in Kemang Village.

b. Introduction E-Commerce

In the introduction of the website *e-commerce* Created by students from the Faculty of Information Technology, they have provided outreach and training to MSMEs. KKN Group 1 students from Al-Ghifari University explained the advantages of doing business online using a website. *e-commerce*, steps from making to selling products on e-commerce websites.

Group 1 conducted outreach and training at several MSME partners in Kemang Village, one of which was BUMDES WANA MUKTI, which operates in the processed food sector. One of the MSMEs (BUMDES) in Kemang Village has succeeded in making e-commerce the stage of registering an account, uploading product photos, packaging products, sending goods, and other features so that they can immediately carry out buying and selling transactions.



Figure 2. WebsiteE-Commerce

c. MSME Training

MSME training is a structured training program for business actors designed to improve digital competency. This activity is systematically organized by Group 1 of the Community Service Program (KKN) in Kemang Village, with a focus on mentoring the use of website-based e-commerce platforms. The training is conducted directly in the Kemang Village Hall, with materials covering digital product management (product photography, catalog uploads, price adjustments, and description optimization). The training for MSME partners of KKN Group 01 is carried out after the e-commerce website is completed. The planned training materials include how to photograph products, upload product images, or change product prices, and others. The benefits of MSME Training on e-commerce include:

a. Opening up insights into global sales

Having an e-commerce website allows MSMEs to sell their products to a wider audience due to the nature of the website itself. In other words, MSMEs can reach a wider market.

b. Increasing Net Profit

With the website *E-commerce*, MSME owners don't need to incur excessive costs by providing multiple stores and staffing. This will increase profits by lowering company operating costs.

d. Research result

The data from the questionnaire distribution results can be presented as follows:

Table 1. Respondent Profile and Percentage of Total Participation and Data Verification

Variables	Category	Number of Respondents	Percentage
Type of Business	Processed Food	13	52%
	Food	12	48%
E-Commerce Website Experience	Ever Used	7	28%
	Never Used	18	72%

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Main Obstacles	Unstable Network	15	60%
	Lack of Technical Understanding	12	48%
	Fear of Risk	9	36%

Total Respondents

- Type of Business: 13 (52%) + 12 (48%) = 25 (100%)
- User Experience:
 - Users: 7 (28%) + 18 (72%) = 25 (100%)
- Main Constraints:
 - 18 (Network) + 12 (Technical) + 9 (Risk) = 39

Table 2. Post-socialization Evaluation Results

Indicator	Very Satisfied (5)	What (4)	Enough (3)	Less(2)	Not satisfied (1)	Average Score
Understanding the material	40%(10 person)	32%(8)	20%(5)	8%(2)	0%(0)	4.04
Benefits of e-commerce	36%(9)	40%(10)	16%(4)	8%(2)	0%(0)	4.04
Readiness	24%(6)	44%(14)	24%(6)	8%(2)	0%(0)	3.84

2). socialization satisfaction shows the following:

- Explanation:
 - X-axis: Rating scale (Very Satisfied to Not Satisfied)
 - Y-axis: Percentage of participants (total 25 people)
- Interpretation:
 - 72% positive response (Very Satisfied + Satisfied = 40% + 32%)
 - 8% criticism (Not satisfied) → Needs material improvement

Based on the questionnaire distribution, the respondent profile consisted of 25 MSMEs, almost evenly divided between two main business types, with 52% and 48%, respectively. Twenty-eight percent of them had previously used e-commerce, while the majority (72%) had never used a digital platform for selling. This indicates that the majority of business owners are still in the early stages of adopting digital technology. The main obstacles faced by participants fell into three dominant categories: internet network issues (18 responses), technical difficulties in using devices or platforms (12 responses), and concerns about risks such as fraud or transaction failures (9 responses). These data indicate that the biggest challenges lie in infrastructure and digital literacy, which are the main obstacles in the digital transformation process of MSMEs in Kemang Village.

The post-socialization evaluation results showed a fairly positive level of participant satisfaction with the materials and training. The average score for understanding the material and the benefits of e-commerce was 4.04 on a scale of 5, indicating that most participants were satisfied with the training provided. This was reinforced by the 72% of respondents who gave ratings of "Very Satisfied" and "Satisfied." However, the participants' readiness to implement e-commerce was lower, averaging 3.84. This figure indicates that although understanding and perception of benefits were quite high, there is still a need for further

mentoring to build confidence and technical skills. In addition, 8% of participants criticized the material presented, indicating the need for improvements in the delivery method or the development of training content to be more inclusive and contextualized to the needs of participants.

E. CONCLUSION

Based on the implementation of the e-commerce development program in Kemang Village, it can be concluded that digital transformation through the implementation of an e-commerce website-based platform has had a significant impact on strengthening the local economy, especially for micro, small, and medium enterprises (MSMEs). The socialization and training provided received a positive response from stakeholders, including the Village Secretary and MSMEs, who demonstrated enthusiasm and readiness to face the digital era. A needs analysis through observation and interviews successfully identified two main challenges: limited capital and human resource capacity (internal aspects), and market competition and regulatory pressures (external aspects). Solutions through website creation and intensive technical assistance proved effective in increasing product visibility, operational efficiency through a pre-order system, and strengthening the capacity of business actors. The program results showed increased market access and digital competitiveness of MSMEs. For sustainability, it is recommended to strengthen internet infrastructure, routine digital training, and policy support from the village government so that digital transformation can be sustainable and adaptive to future challenges. These findings contribute significantly to the village MSME development model in the digital era and emphasize the importance of long-term assistance and local policy support for the village digital economy ecosystem.

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