

## Optimization of Digital Technology Utilization in Marketing Strategy Development to Enhance the Competitiveness of MSME Products

Rachmiani <sup>1\*</sup>, Naufal Haidar Ahmada <sup>2</sup>, Darusman <sup>3</sup>

<sup>1\*</sup> Faculty of Economics, Entrepreneurship Study Program, Institut Teknologi Sains Muhammadiyah Kolaka Utara, North Kolaka Regency, Southeast Sulawesi Province, Indonesia.

<sup>2</sup> Urban and Regional Planning Study Program, Institut Teknologi dan Bisnis Muhammadiyah Purbalingga, Purbalingga Regency, Central Java Province, Indonesia.

<sup>3</sup> Faculty of Economics and Business, Digital Business Study Program, Universitas Muhammadiyah Pontianak, Pontianak City, West Kalimantan Province, Indonesia.

Email: rachmimustaqim@gmail.com <sup>1\*</sup>, naufal@itbmp.ac.id <sup>2</sup>, darusman@unmuhpnk.ac.id <sup>3</sup>

Article history:

Received January 14, 2025

Revised January 28, 2025

Accepted January 30, 2025

### Abstract

This study aims to analyze the impact of digital technology on marketing strategy development and its effect on the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. In an era of rapid digitalization, adopting digital technology has become a crucial factor in enhancing the competitiveness of MSMEs. The research utilizes a quantitative approach with a survey design, where data was collected through questionnaires distributed to 100 MSME entrepreneurs who have integrated digital technology into their marketing strategies. The findings indicate that using social media and e-commerce platforms significantly contributes to increased brand awareness, sales, and customer loyalty for MSMEs. Approximately 68% of respondents reported a sales boost after utilizing digital platforms, while more than 60% noted enhanced brand visibility. On the other hand, despite the great potential of SEO and email marketing to improve competitiveness, the application of these strategies remains limited. Multiple linear regression analysis suggests that the more intensively digital technology is used, the greater the competitiveness of MSME products in an increasingly competitive market. These findings emphasize the importance of integrating digital technology into MSME marketing strategies to strengthen their position in domestic and global markets. Therefore, MSME entrepreneurs are encouraged to expand their understanding and implementation of additional digital marketing strategies and seek more significant support from the government and related institutions.

### Keywords:

Digital technology; Marketing strategies; Product competitiveness; MSMEs; Social media; e-Commerce.

## 1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia play a pivotal role in the national economy, contributing over 60% to the Gross Domestic Product (GDP) and providing employment to more than 90% of the workforce. However, one of the key challenges facing MSMEs is the limited access to technologies that can support business growth, particularly in marketing. The rapid advancement of digital technologies presents significant opportunities for MSMEs to leverage digital marketing tools and enhance their competitiveness. Implementing digital marketing strategies is crucial in helping MSMEs achieve their marketing goals in a more targeted and efficient manner. Through digital technology, MSMEs can design measurable marketing campaigns that reach broader audiences locally and globally. Platforms such as social media, e-commerce, and paid advertisements provide MSMEs opportunities to expand market reach without the high costs typically associated with traditional marketing methods. Digital marketing enables businesses better to understand consumer preferences and behaviors through data analytics. By gaining insights into

customer characteristics, MSMEs can tailor their marketing strategies to be more relevant and personalized, increasing conversion rates and customer retention. This data-driven approach facilitates faster and more informed decision-making, which is essential in a dynamic and competitive marketplace (Vuttichat, 2023).

Additionally, digital marketing fosters innovation in content creation and new ways to interact with audiences. MSMEs can explore creative content forms such as videos, articles, and interactive social media campaigns to capture attention and build closer customer relationships. These innovations enhance marketing effectiveness and help MSMEs remain relevant amidst the rapid pace of digital trends. Optimizing digital marketing strategies offers significant competitive advantages for MSMEs, enabling them to increase visibility, strengthen brand presence, and improve product competitiveness in an increasingly globalized market. The continuous adoption of evolving digital technologies, such as Artificial Intelligence (AI), blockchain, cloud computing, big data, 5G, the Internet of Things (IoT), social media, and cybersecurity technologies, holds substantial potential to support significant digital transformations for MSMEs. These technologies provide various benefits that can optimize operations, marketing, and resource management more efficiently and effectively. The use of social media in digital marketing allows MSMEs to reach wider audiences at relatively lower costs. At the same time, cybersecurity technologies play a critical role in protecting data and systems from cyber threats. These elements contribute to the digital transformation that can enhance MSME performance and competitiveness in an increasingly interconnected global market, as Teng *et al.* (2022) noted. AI, for example, enables MSMEs to automate various business processes, such as customer service, data analysis, and inventory management, thus improving productivity and reducing operational costs. Blockchain technology can enhance transaction transparency and security, particularly in businesses involving supply chains or financial transactions. Cloud computing, on the other hand, provides a flexible and affordable platform for storing and managing data and supporting real-time team collaboration without the need for expensive physical infrastructure. Big data allows MSMEs to analyze consumer behavior patterns and market trends more accurately, facilitating data-driven decision-making. The adoption of 5G technology, with faster internet speeds and lower latency, offers MSMEs the opportunity to enhance digital services and customer interactions more responsively. IoT, meanwhile, connects devices and systems to automatically collect data, which can be used to improve asset management and operational efficiency.

Despite these opportunities, MSMEs' adoption of Industry 4.0 technologies faces numerous challenges, particularly in applying technologies related to production process monitoring and operational flexibility enhancement. Technologies such as smart sensors, robotics-based automation, real-time analytics, and interconnected production systems present significant potential to boost efficiency and competitiveness. However, many MSMEs have yet to fully utilize these capabilities due to resource limitations, technical knowledge, and access to relevant technologies (Gamache *et al.*, 2020). The primary barriers to adoption include relatively high implementation costs, a lack of workforce with adequate technological skills, and insufficient understanding of the long-term benefits of investing in digital technologies. As a result, many MSMEs rely on conventional approaches in their production processes, making them less adaptable to changing market needs and industry dynamics. Technologies enabling digital production monitoring, such as IoT and intelligent manufacturing systems, can improve visibility and control over daily operations. These technologies allow MSMEs to identify process inefficiencies, reduce production waste, and adjust production according to demand changes. However, implementing these technologies often requires significant initial hardware and employee training investments. Increasing flexibility through the adoption of digital technologies also plays a critical role in addressing the challenges of dynamic markets. This flexibility enables MSMEs to rapidly modify production lines or adjust products based on consumer demands. Consequently, support from various stakeholders, including the government, technology providers, and educational institutions, is essential to provide training, subsidies, and infrastructure that facilitate the digital transformation of MSMEs.

Competitiveness is often a significant obstacle for SMEs facing dynamic market challenges and increasingly intense competition. This limitation affects the ability of SMEs to respond quickly to changes in market conditions, both in terms of adjusting their products and business strategies. Additionally, weak competitiveness limits SMEs' capacity to innovate and explore new opportunities, thus reducing their chances of growth in local and global markets. To overcome this, SMEs must build and strengthen an integrated competency system. This system encompasses technical, managerial, and strategic skills relevant to the industry's needs. With aligned competencies, SMEs can improve productivity, optimize operational processes, and create added value to their products or services. A well-structured competency system also enables SMEs to identify strategic growth opportunities through product diversification, entering new markets, or collaborating with other parties. Building an aligned competency system requires investment in workforce training, adopting technology that supports operational efficiency, and enhancing managerial capabilities. These factors support optimal performance and strengthen the foundation of SMEs' businesses in facing long-term challenges. With a structured system, SMEs can develop flexibility to adapt to market dynamics while creating a competitive edge. Support from various parties, including the government, educational institutions, and industry partners, is also crucial in strengthening this competency. Training programs, mentoring, and access to technological resources and markets can catalyze SMEs to achieve optimal performance (Lafuente *et al.*, 2020).

The utilization of social media can provide promising prospects for increasing SME product sales, particularly during the COVID-19 pandemic, because the digital marketing system offers online buying-and-selling platforms that facilitate the ordering and purchasing process (Achmad *et al.*, 2020). Technological, organizational, and environmental factors influence SMEs' adoption of Industry 4.0 technologies. However, SMEs need knowledge, competency, and readiness in digitalizing the value chain to succeed in digital transformation. An effective marketing strategy becomes one of the key factors for the success of SMEs in maintaining their presence amid increasingly fierce competition. Digital technologies, such as social media, e-commerce, and data analytics, play a significant role in improving the effectiveness of marketing strategies. Social media allows SMEs to reach a wider audience, engage directly with customers, and establish more personal and sustainable relationships. With features such as paid ads and analytical tools, these platforms also provide the ability to target specific market segments, thus enhancing the efficiency of marketing campaigns.

On the other hand, e-commerce opens up opportunities for SMEs to market and sell their products in a broader market, both locally and internationally. This platform reduces geographical limitations and provides SMEs access to manage inventories, process transactions, and offer customers a more convenient shopping experience. The presence of e-commerce provides a significant competitive advantage, especially for SMEs aiming to increase the competitiveness of their products in the digital era. Data analytics also plays an important role in developing marketing strategies. SMEs can better understand consumer preferences, needs, and behaviors by utilizing data generated from customer interactions. This information enables SMEs to design more relevant and targeted strategies, improving conversion opportunities and strengthening customer loyalty. According to Salam *et al.* (2020), digital technologies contribute significantly to the development of marketing strategies that are not only effective but also adaptive to the changing needs of the market. Furthermore, these technologies play a vital role in enhancing the competitiveness of SME products by strengthening operational efficiency and better resource management.

SMEs' marketing strategies can be classified into two main categories: traditional and digital marketing strategies. The traditional approach generally involves promotions through print media, radio ads, or local events limited to a particular geographic area. In contrast, digital marketing strategies leverage technology to reach a broader market more efficiently. According to Sulistyawati *et al.* (2024), SMEs that adopt digital technologies in their marketing strategies are better positioned to attract new consumers due to the global reach offered by digital platforms such as social media, websites, and e-commerce. Digital technology also provides SMEs opportunities for product and service personalization, an essential element in building stronger consumer relationships. SMEs can identify customer preferences and needs by using tools like Customer Relationship Management (CRM) and data analytics. This information allows SMEs to tailor their offerings, whether through more relevant products or promotional campaigns that capture the attention of specific market segments. Using digital analytics tools also provides additional advantages in understanding consumer behavior. Data generated from customer interactions, such as buying habits, product interests, and website visit patterns, can be analyzed to develop more effective and data-driven marketing strategies. For instance, SMEs can determine the best time to launch promotions or select the most effective platform to reach their target audience. By adopting digital strategies, SMEs improve marketing efficiency and create more substantial competitiveness in a highly competitive market. This makes digital transformation a crucial strategic step for the long-term success of SMEs.

## 2. RESEARCH METHOD

This study employs a quantitative approach with a survey design to assess the impact of digital technology on the development of marketing strategies and its effect on the competitiveness of SME products. A quantitative approach was chosen because it allows for hypothesis testing based on relevant theories and provides an objective overview of the relationships between the variables under investigation. The research design is cross-sectional, meaning that data will be collected at a specific time to describe the current state of digital technology utilization in marketing and its impact on SME product competitiveness. The study population consists of active SMEs in Indonesia that use digital technology in their marketing strategies. According to data from the Central Bureau of Statistics (BPS), there are an estimated 64 million SMEs across Indonesia. A purposive sampling technique was used to select SMEs that have utilized digital technology for at least one year in their marketing activities. A sample of 100 respondents was selected and calculated using the Slovin formula to ensure a low margin of error and a high confidence level. The sample was selected based on location and business sector to encompass a variety of SMEs, including those in the food, handicrafts, fashion, and technology services sectors.

The study analyzes three main variables: independent, moderating, and dependent variables. The independent variable is the use of digital technology in marketing, which is measured based on the frequency of digital platform usage (social media, e-commerce, and websites), the types of technology employed, and the level of engagement with the audience. The moderating variable is the digital marketing strategy, which includes various techniques such as content marketing, paid advertising, email marketing, and SEO. These

are measured based on the type of strategy implemented and its effectiveness in reaching the target market. The dependent variable is the competitiveness of SME products, which is measured using indicators such as increased sales, brand visibility, and customer loyalty. Data will be collected using a closed-ended questionnaire divided into several sections: (1) demographic questions of respondents; (2) measurement of digital technology usage in marketing; (3) digital marketing strategies implemented; and (4) competitiveness of SME products. To facilitate data analysis, a 5-point Likert scale will be used to measure responses to each question, ranging from 1 (strongly disagree) to 5 (strongly agree). The data will be gathered through an online survey using platforms like Google Forms and distributed via email and social media to reach more relevant SMEs. The questionnaire will be pre-tested on a small sample to ensure the validity and reliability of the instrument. After data collection, analysis will be performed using multiple linear regression with statistical software such as SPSS or SmartPLS. Multiple linear regression examines the relationships between the independent variables (digital technology usage and digital marketing strategies) and the dependent variable (SME product competitiveness). The analysis process includes tests for normality, validity and reliability tests, descriptive analysis, and multiple linear regression to measure the contribution of each variable to enhancing SME product competitiveness. The primary hypothesis to be tested is that using digital technology in marketing positively affects SME product competitiveness. In contrast, the second hypothesis posits that digital marketing strategies moderate the relationship between digital technology use and SME product competitiveness. Hypothesis testing will be conducted using statistical tests to assess the significance of the relationships between the variables, where a result significant at the  $p < 0.05$  level will indicate that the hypothesis is accepted.

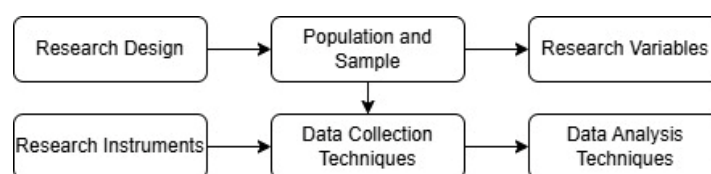


Figure 1. Research Design

The figure above illustrates the flow of the research methodology, which includes five main elements: research design, population and sample, research variables, research instruments, data collection techniques, and data analysis techniques. This flowchart shows the logical relationships between these elements, from the design phase to analysis, ensuring the generation of valid data supporting the research objectives.

### 3. RESULTS AND DISCUSSION

#### 3.1. Results

##### 3.1.1. Respondent Description

This study involved 100 small and medium-sized enterprises (SMEs) that have integrated digital technology into their product marketing strategies. According to Fardanty *et al.* (2024), most respondents come from the food and beverage sector, representing 38% of the total sample. This sector dominates due to high market demand that can easily be reached through digital platforms, especially social media, which is effective for visually promoting products and engaging consumers. The handicrafts sector contributes 27% of the sample, showing a significant potential for this industry to leverage digital technology in marketing creative products. The fashion sector, which accounts for 18%, uses social media and e-commerce to expand its audience reach. In contrast, the technology services sector, comprising 17%, increasingly relies on digital platforms for promotions and consumer interactions. All respondents have been using digital technology for more than a year, providing a solid foundation to assess its impact on the competitiveness of SME products. Furthermore, they are familiar with various digital platforms that can support their marketing efforts. Regarding marketing channel preferences, most SMEs (70%) favor social media as their primary product promotion tool. Social media is highly popular due to its easy access, relatively low costs, and ability to create direct interactions between businesses and consumers. Platforms such as Instagram, Facebook, and TikTok allow SMEs to reach a broader audience and build closer customer relationships. On the other hand, around 25% of respondents rely on e-commerce platforms to market their products. E-commerce platforms like Tokopedia, Bukalapak, and Shopee offer advantages in transaction convenience, wider market reach, and secure payment facilities. However, only about 5% of respondents use websites as their primary marketing channel, suggesting that website usage is still limited, possibly due to cost constraints and technical limitations in managing this platform. Demographically, 60% of respondents are between 25 and 40 years old. This age group shows strong interest and capability in adopting digital technology for their businesses. This can be attributed to the characteristics of younger generations, who are more familiar with technology and digital media in both personal and professional life.

In contrast, older age groups tend to be more conservative in adopting new technologies. Therefore, age is key in determining how SMEs can utilize digital technology to support marketing activities and enhance



product competitiveness. This finding also indicates that younger SME owners are more likely to innovate with digital technologies, enabling them to overcome marketing challenges in a competitive sector. These young entrepreneurs rely on their experience and are open to experimentation and faster learning of effective digital marketing strategies. Respondents' demographic profile and the use of digital technologies give a clear picture of technology's role in supporting SME marketing strategies across various sectors. It also emphasizes the importance of digital technologies, mainly social media and e-commerce, in enhancing the competitiveness of SME products in an increasingly competitive market.

Table 1. Respondent Profile

Category	Percentage (%)	Description
<b>Business Sector</b>		
Food and Beverage	38%	Most respondents are from this sector, which intensively uses social media and e-commerce.
Handicrafts	27%	SMEs in this sector use digital technology for promoting creative products.
Fashion	18%	The use of social media and e-commerce is significant in expanding market reach.
Technology Services	17%	This sector is increasingly dependent on digital platforms for marketing and consumer interaction.
<b>Marketing Platforms Used</b>		
Social Media	70%	The majority of SMEs use social media platforms like Instagram, Facebook, and TikTok for marketing.
E-commerce	25%	E-commerce platforms like Tokopedia and Bukalapak are quite popular among respondents.
Website	5%	Only a small percentage of respondents use websites as their primary marketing channel.
<b>Respondent Age</b>		
25 - 40 Years	60%	This age group is more inclined to adopt digital technology for their businesses.
> 40 Years	40%	This group is more conservative in adopting new technologies.

The table above provides a complete description of the respondents involved in the study. The most dominant business sector is food and beverage (38%), followed by handicrafts, fashion, and technology services. Most SMEs (70%) use social media as their primary marketing channel, while e-commerce and websites account for a smaller share. Demographic data reveals that most respondents (60%) are between 25 and 40 years old, reflecting a strong trend among younger age groups to adopt digital technology in marketing. This shows how quickly younger entrepreneurs are adapting to the digital business world.

### 3.1.2. Use of Digital Technology in Marketing

The research results indicate that social media is SMEs' most widely used digital platform to market their products. 72% of respondents reported actively using features offered by social media platforms, particularly Instagram and Facebook, the two primary platforms chosen. According to Novita *et al.* (2024), features such as paid advertisements, regular posts, and influencer collaborations are maximized to expand audience reach and build closer consumer relationships. Paid advertisements, in particular, allow SMEs to target a more specific audience based on demographic data, interests, and user behavior, which benefits brand awareness and engagement. Interactive features, such as live streaming and story posts, have proven effective in creating more direct and authentic promotions. These features enable SMEs to engage with their audience in real time, answer questions, and introduce products more personally and engagingly. For example, live streaming allows SMEs to showcase the product creation process, share the story behind the brand, or offer exclusive promotions that can capture consumer attention quickly. However, e-commerce platforms such as Tokopedia, Bukalapak, and Shopee also show significant usage, although lower than social media, with around 25% of respondents utilizing them. E-commerce offers advantages such as broader market access, easier transactions, and more secure payment systems. However, the analysis reveals that some SMEs have not fully optimized the potential of these e-commerce platforms. This is due to factors such as limited online store management skills, which require more advanced technical expertise, and resource limitations in terms of time and workforce. Additionally, SMEs often struggle to implement effective promotional strategies on highly competitive e-commerce platforms, where many similar products compete in the same space.

A small percentage of respondents, around 3%, reported using company websites and applications as marketing channels. The use of websites as a marketing tool remains limited, even though websites can offer benefits such as enhanced brand credibility and the convenience of direct store management by the business owner. Some SMEs still perceive that having a website requires significant investment and higher technical

skills, while social media and e-commerce platforms offer greater ease and more affordable costs. Despite various barriers to optimizing the use of digital technology, the results of this study show that social media remains the preferred choice for SMEs due to its ease of use, cost-effectiveness, and potential for building stronger relationships with consumers. Adopting digital technology can provide a significant competitive advantage, especially in enhancing brand awareness, expanding market reach, and facilitating more effective two-way communication between SMEs and their customers. While social media and e-commerce usage are already widespread, SMEs still have great potential to optimize other digital platforms, such as SEO and email marketing, to strengthen their position in the increasingly digital and competitive market.

Table 2. Use of Digital Platforms by SMEs

Digital Platform	Usage Percentage (%)	Usage Description
Social Media	72%	Most SMEs use social media, especially Instagram and Facebook, for product marketing. Features like paid ads, regular posts, and influencers are used to increase brand awareness and engagement.
E-commerce	25%	SMEs utilize e-commerce platforms like Tokopedia, Bukalapak, and Shopee to expand market reach and facilitate secure online transactions.
Company Website & Apps	3%	The use of websites and company apps remains limited due to higher technical skill requirements and greater investment costs.
Live Streaming & Story Posts	-	Features like live streaming and story posts on social media are used for direct, interactive promotions, allowing SMEs to engage in real-time with their audience.

The table above illustrates the digital platform usage by SMEs in their marketing strategies. Most SMEs (72%) use social media, particularly for paid ads, regular posts, and influencer collaborations. E-commerce platforms like Tokopedia and Bukalapak are used by 25% of respondents to expand market reach. Meanwhile, only 3% of respondents use websites as marketing platforms, focusing on online store management and brand credibility. This table highlights the dominant trend of digital technology adoption among SMEs.

### 3.1.3. Digital Marketing Strategies

To develop and strengthen their market position, MSMEs (Micro, Small, and Medium Enterprises) increasingly rely on digital marketing strategies as an effective tool. According to Iqbal *et al.* (2024), the research results indicate that content marketing and paid advertising are two of the most commonly used digital marketing techniques. As many as 60% of respondents stated that they actively create creative content to attract consumers' attention and increase engagement. The types of content produced include product videos, blog articles, and infographics that provide information and entertain and educate the audience. Engaging and relevant content has been proven to increase engagement and interaction with the audience, directly impacting increased sales and customer loyalty.

On the other hand, about 55% of respondents reported using paid advertisements on social media platforms such as Facebook Ads and Instagram Ads to expand their market reach. Paid advertising allows MSMEs to target a more specific audience based on age, location, interests, and user behavior, which can yield a higher Return on Investment (ROI). However, although this technique has proven effective, the cost of paid ads can be a barrier for some MSMEs, especially those with limited marketing budgets. Therefore, it is crucial for MSMEs to carefully plan their marketing budgets to maximize the results of paid ads without exceeding their financial capacity. Other marketing techniques, such as email marketing and Search Engine Optimization (SEO), are still used in relatively small proportions. Only about 10% of respondents use SEO to improve the performance of their website in search engines, which can help attract more organic traffic without additional costs. Using SEO requires a good understanding of search engine algorithms and technical skills in optimizing website content, which often becomes a challenge for MSMEs with limited resources and technical knowledge. Likewise, email marketing is used by about 12% of respondents to build a more personal relationship with customers, send promotions, and update customers on the latest products. Although this technique can potentially increase customer loyalty and sales conversions, its implementation among MSMEs remains limited, likely due to a lack of knowledge about effective marketing techniques or limitations in using automated marketing tools. Although content marketing and paid advertising have shown significant results in increasing product visibility and customer engagement, there is a significant opportunity for MSMEs to leverage other digital marketing techniques, such as SEO and email marketing, which can provide long-term results at lower costs. Utilizing a more diverse range of digital marketing strategies can provide a significant competitive advantage in a market increasingly dominated by digital technology.

Table 3. Digital Marketing Strategy for MSMEs

Digital Marketing Strategy	Usage Percentage (%)	Usage Description	Profit	Challenge
Content Marketing	60%	MSMEs actively create creative content such as product videos, blog articles, and infographics to attract consumers' attention.	Increase engagement and interaction with audiences, increase sales.	It takes creative resources and time to create quality content.
Paid Advertising (Facebook & Instagram Ads)	55%	Using paid advertising to expand market reach through social media platforms such as Facebook and Instagram.	Increase product visibility and ROI with a more specific target audience.	Requires a fairly large marketing budget.
Search Engine Optimization (SEO)	10%	Leveraging SEO to improve website rankings in search engines to attract organic traffic.	Reduce dependence on paid advertising and increase organic traffic.	Requires in-depth technical knowledge and website optimization.
Email Marketing	12%	Use email marketing to build personal relationships with customers, send promotions, and new product notifications.	Increase customer loyalty and sales conversion.	Requires proper content strategy and effective email database management.

The table highlights how SMEs utilize digital platforms for marketing. The majority (60%) focus on content marketing, creating videos, blogs, and infographics to engage audiences. Paid advertising on Facebook and Instagram follows at 55%, while SEO and email marketing are less popular, with 10% and 12% usage respectively, reflecting varying levels of technical expertise and resource allocation.

#### 3.1.4. The Impact of Digital Technology on the Competitiveness of MSME Products

Multiple linear regression analysis shows that using digital technology in marketing strategies significantly influences the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) products. According to Salam *et al.* (2024), the regression coefficients indicate that digital technology use, including social media and e-commerce, contributes positively to improving MSME product competitiveness ( $p < 0.05$ ). This finding confirms that the more intensively and optimally MSMEs use digital technology, the greater their product competitiveness in an increasingly competitive market. One key indicator of the positive impact of digital marketing on competitiveness is the increase in sales. In a survey, 68% of respondents reported significant sales growth after using social media and e-commerce platforms as their primary marketing channels. This reinforces the argument that digital presence, enabling MSMEs to reach a broader market, directly impacts sales volume and product marketing success. Brand visibility also showed a significant increase thanks to social media use. These platforms provide ample space for MSME products to be introduced to a broader audience through organic content and paid ads. The survey results indicated that over 60% of respondents experienced increased brand awareness after leveraging digital technology in their marketing strategy. This increased exposure helps MSME products gain broader recognition and strengthens brand image, leading to higher purchase interest. Customer loyalty also improved, albeit to a lesser extent. MSMEs that actively engage with customers on social media tend to build stronger relationships and improve customer retention rates. Direct and responsive interactions to questions, feedback, and complaints on digital platforms help create a better and more immersive customer experience. However, customer loyalty is influenced by digital interactions and the quality of products and services offered by MSMEs. Therefore, loyalty built through digital technology must be supported by high-quality products and services to contribute maximally to long-term competitiveness. This study highlights the importance of integrating digital technology into MSME marketing strategies. The use of social media and e-commerce not only expands market reach but also enhances product competitiveness by increasing brand visibility, sales, and customer loyalty. Therefore, MSMEs must prioritize leveraging digital technology as an integral part of their marketing strategy to remain relevant and competitive in an increasingly dynamic market.

#### 3.1.5. The Impact of Digital Marketing Strategies on Competitiveness

The digital marketing strategies implemented by Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in strengthening the relationship between digital technology use and improved product competitiveness. According to Imilda *et al.* (2024), properly implementing digital marketing strategies in an increasingly digitally connected era is a key factor in determining MSMEs' success in competing in a

growing global market. The research findings show that several digital marketing elements, such as content marketing and paid advertising, significantly impact brand awareness, consumer engagement, and product sales volume. Content marketing, which includes creating and distributing relevant and valuable content for target audiences, has been proven to enhance brand awareness more organically and sustainably. Through engaging and informative content, MSMEs can build long-term relationships with consumers, increasing brand awareness and fostering customer loyalty.

On the other hand, paid ads, such as social media and Google Ads, provide MSMEs with the opportunity to reach a broader, more targeted audience efficiently. Targeted ads enable MSMEs to connect with consumers whose interests and needs align with their products, increasing conversion and sales opportunities. The integrated application of these two digital marketing strategies allows MSMEs to optimize their market reach more effectively and efficiently. In this regard, content marketing can capture the audience's attention and build deeper engagement. At the same time, paid ads can accelerate conversion by guiding the educated audience toward the purchase point. The combination of both creates a synergy that strengthens the competitive position of MSME products in an increasingly saturated market. Despite the positive impact of content marketing and paid ads on competitiveness, the research also revealed that some other digital strategies have yet to be optimally utilized by many MSMEs. For example, a small portion of survey respondents only use search engine optimization (SEO) and email marketing. This indicates that many MSME players have yet to fully realize the potential of these two strategies in strengthening their market position.

SEO, a set of techniques to improve the visibility and ranking of a website on search engines like Google, can be a highly effective tool for increasing online reach and visibility. MSMEs can attract more relevant visitors and increase conversion opportunities by optimizing their website content and structure. However, effective SEO implementation requires technical knowledge and specialized skills. Therefore, a lack of knowledge or skills in search engine optimization can hinder MSMEs from fully exploiting SEO's potential. Email marketing, which involves sending direct messages to customers or potential customers via email, holds significant potential for building closer relationships with audiences. With proper management, email marketing can provide product information, special promotions, or valuable content that encourages customers to make repeat purchases. However, due to the more complex management of email marketing campaigns, only a few MSMEs implement this strategy effectively. Some barriers that MSMEs may face in email marketing include a lack of skills in creating engaging campaigns and limitations in technology and resources to manage customer email lists efficiently. These findings show that while many MSMEs have embraced digital marketing through content marketing and paid ads, opportunities remain untapped, particularly in SEO and email marketing. There is an urgent need for MSMEs to expand their understanding and skills in both strategies. Outreach, training, and more significant support from government agencies, educational institutions, and technology companies can help MSMEs overcome the challenges of implementing more complex digital strategies, enhancing their competitiveness in this increasingly digital marketplace. Properly implementing digital marketing strategies can significantly contribute to MSME product competitiveness. MSMEs can expand their market reach, increase brand awareness, and strengthen customer relationships by integrating various digital marketing elements, such as content marketing, paid ads, SEO, and email marketing. Therefore, MSME players must continue developing and optimizing digital marketing strategies to maintain and enhance the competitiveness of their products, both in domestic and global markets.

### **3.1.6. Practical Implications**

Based on the research results, optimizing digital technology in marketing strategies significantly impacts improving the competitiveness of micro, small, and medium enterprises (MSMEs). According to Idwan et al. (2024), this study shows that leveraging digital technology, especially social media and e-commerce platforms, plays a crucial role in expanding market reach, increasing brand visibility, and accelerating sales conversion. Therefore, MSME practitioners are strongly encouraged to expand the adoption of digital technologies as an integral part of their marketing strategies. More intensive social media and e-commerce use allows MSMEs to reach a broader audience, optimize customer interaction, and take advantage of various digital features that can enhance promotional and sales effectiveness. To maximize the potential of digital technology, MSMEs need to explore and implement other digital strategies, such as Search Engine Optimization (SEO), email marketing, and data analytics, to understand consumer behavior better. SEO, for instance, can help MSMEs improve their website visibility on search engines, attracting more relevant visitors who are highly likely to make purchases. Email marketing also serves as an effective tool for building closer relationships with customers, delivering personalized information, and encouraging repeat purchases. On the other hand, using data analytics allows MSMEs to identify consumer behavior patterns, evaluate marketing campaign effectiveness, and optimize existing marketing strategies to increase conversion rates and customer retention.

It is also crucial for MSME users not to rely solely on proven digital strategies but to continuously innovate and adapt their approaches to the evolving market trends. In this context, adapting to new technologies, such as Artificial Intelligence (AI), predictive analytics, and marketing automation, could be



key to remaining competitive in an increasingly digital and data-driven market. In addition to the active role of MSME practitioners, support from the government and related institutions is also essential to ensure that MSMEs can optimally access and utilize digital technology. The government plays a strategic role in creating policies that support the development and adoption of technology by MSMEs, such as providing digital skills training facilities, incentives for technology usage, and developing more affordable digital infrastructure. Furthermore, providing easier financing and access to MSME-friendly digital platforms can be a determining factor in increasing their participation in the digital ecosystem. MSMEs can acquire the skills and knowledge needed to leverage digital technologies effectively through relevant training. This training could cover topics such as the basics of digital marketing, data analysis tools, SEO strategies, and the management of paid advertising campaigns. By doing so, MSMEs will not only learn how to operate digital tools but will also be able to formulate and implement more targeted and effective marketing strategies. Financial institutions and the private sector can also provide easier access to financing for MSMEs looking to invest in digital technology. Financing for website development, purchasing marketing software, or conducting digital advertising campaigns can be a significant challenge for many MSMEs, especially those with limited capital. Therefore, providing affordable financial resources and technology-based financing programs can significantly boost MSMEs to adopt more advanced digital solutions and enhance their competitiveness. The practical implications of this research indicate that optimizing digital technology in marketing is the key to improving the competitiveness of MSME products. MSMEs can gain significant competitive advantages by integrating various digital tools and strategies and by receiving adequate support from the government and relevant institutions. Therefore, all parties must collaborate to create an ecosystem that supports the digital transformation of MSMEs, enabling them to adapt to the increasingly evolving market dynamics and enhance the sustainability of their businesses in the long term.

### 3.2. Discussion

The findings of this study indicate that the use of digital technology, mainly social media and e-commerce, plays a significant role in enhancing the competitiveness of MSME products. These findings align with research by Achmad *et al.* (2020), which states that social media is an effective marketing tool for MSMEs as it can reach a broad audience visually and interactively. Social media platforms such as Instagram and TikTok are used by the majority of respondents (70%) to promote their products, utilizing features such as paid advertisements, live streaming, and creative visual content. This is also supported by Imilda *et al.* (2024) on the effectiveness of social media in marketing. Additionally, e-commerce platforms like Tokopedia and Shopee are used by 25% of respondents to expand market access and facilitate secure transactions. Research by Sulistyawati and Munawir (2024) further highlights that e-commerce is essential in building competitive advantages for MSMEs through easy accessibility and payment options. However, the low usage of websites (5%) as a primary marketing channel suggests technical and cost limitations, as also found in Prihandono's (2024) research on the challenges of MSME digital transformation.

Digital marketing strategies, such as content marketing and paid advertising, have proven effective in increasing brand visibility, consumer engagement, and product sales. This is consistent with the findings of Iqbal *et al.* (2024), who showed that engaging content creates better customer interaction, while paid ads allow MSMEs to target consumers more specifically. However, the adoption of techniques like SEO (10%) and email marketing (12%) remains limited, indicating a need for further training to help MSMEs optimize their digital potential, as suggested by Vuttichat (2023) and Lafuente *et al.* (2020). In addition to strategies, MSME competitiveness is also influenced by the age of business owners. Most respondents (60%) are between the ages of 25-40, a group more adaptable to digital technologies, as highlighted by Gamache *et al.* (2020). This age group is more responsive to market changes and digital innovations, enabling them to compete in an increasingly competitive marketplace.

This study emphasizes the importance of optimizing digital technology to enhance MSME competitiveness. Salam and Imelda (2024) state that integrating digital technology allows MSMEs to reach broader markets, improve brand visibility, and strengthen customer loyalty. Training support, government incentives, and access to digital resources can accelerate MSMEs' digital transformation, as Akbar *et al.* (2023) recommended. Thus, MSMEs prioritizing digital technology in their marketing strategies will be better prepared to face the challenges and opportunities in an increasingly digital and competitive global market.

## 4. CONCLUSION

This study concludes that the optimization of digital technology in marketing strategies has a significant impact on the competitiveness of MSME products. The use of social media and e-commerce platforms has proven to make a positive contribution to enhancing product visibility, expanding market reach, and driving sales growth. Based on the analysis, the more intensive and targeted the use of digital technology by MSME owners, the greater their chances of competing in an increasingly competitive market. The findings show that digital marketing through social media platforms such as Instagram, Facebook, and TikTok significantly

impacts brand awareness and customer engagement. Paid advertisements on social media allow MSMEs to target a more specific audience, improve marketing efficiency, and generate a higher return on investment (ROI). On the other hand, using e-commerce also opens access to a broader market and facilitates easier transactions. However, implementing this strategy requires a deeper understanding of online store management. Nevertheless, there is untapped potential in terms of SEO and email marketing. These two marketing techniques could enhance MSME competitiveness in the long term at lower costs. However, the main barrier to fully implementing these strategies is the lack of knowledge and technical skills among MSME owners. The findings of this study emphasize that integrating digital technology into marketing strategies is the key to enhancing MSME product competitiveness. Therefore, MSME owners are advised to continuously develop and optimize their use of digital marketing and address technical barriers to fully leverage the potential of available digital strategies. Support from government bodies, educational institutions, and the private sector is also crucial in supporting the digital transformation of MSMEs.

## REFERENCES

- Achmad, Z., Azhari, T., Esfandiar, W., Nuryaningrum, N., Syifana, A., & Cahyaningrum, I. (2020). Pemanfaatan media sosial dalam pemasaran produk umkm di kelurahan sidokumpul, kabupaten gresik. *Jurnal Ilmu Komunikasi*, 10(1), 17-31. <https://doi.org/10.15642/jik.2020.10.1.17-31>
- Akbar, M., Effendi, M., Nawarcono, W., Priambodo, A., & H.S, S. (2023). The sustainability of msme business competitiveness in bogor city in review from entrepreneurial orientation, financial capital and innovation. *Jurnal Bisnisan Riset Bisnis Dan Manajemen*, 5(1), 80-93. <https://doi.org/10.52005/bisnisan.v5i1.136>
- Fardanty, R. (2024). Sistem Informasi Katalog Produk Pasar Tani Berbasis Web Pada Dinas Pertanian Dan Perkebunan Aceh. *Jurnal Ilmu Komputer Dan Teknologi Informasi*, 1(2), 51-61. <https://doi.org/10.35870/jikti.v1i2.1089>
- Gamache, S., Abdul-Nour, G., & Baril, C. (2020). Evaluation of the influence parameters of industry 4.0 and their impact on the quebec manufacturing smes: the first findings. *Cogent Engineering*, 7(1), 1771818. <https://doi.org/10.1080/23311916.2020.1771818>
- Idwan, H., Haikal, M. H., & Wali, M. (2024). Pemanfaatan Tools Canva Dan Template.Net Dalam Pembuatan Sertifikat Online Pada Dinas Pangan Provinsi Aceh. *Jurnal Sistem Komputer (SISKOM)*, 4(2), 72-86. <https://doi.org/10.35870/siskom.v4i2.814>
- imilda, Hajriyanti, R., & Zahra, R. (2024). Pengaruh Faktor yang Mempengaruhi Pembelian Impulsif Online Produk Fashion melalui Siaran Langsung: Perbandingan antara Instagram dan TikTok. *Jurnal Manajemen Dan Teknologi*, 1(2), 1-15. <https://doi.org/10.35870/jmt.v1i2.1055>
- Iqbal, T., Ismail, & Anisah. (2024). Dampak Persepsi Konsumen dan Pelayanan terhadap Keputusan Pembelian: Studi Empiris di Sektor Kuliner. *Jurnal Manajemen Dan Teknologi*, 1(2), 45-57. <https://doi.org/10.35870/jmt.v1i2.1107>
- Lafuente, E., Szerb, L., & Rideg, A. (2020). A system dynamics approach for assessing smes' competitiveness. *Journal of Small Business and Enterprise Development*, 27(4), 555-578. <https://doi.org/10.1108/jsbed-06-2019-0204>
- Novita, Y., & Zahra, R. (2024). Penerapan Artificial Intelligence (AI) untuk Meningkatkan Efisiensi Operasional di Perusahaan Manufaktur: Studi Kasus PT. XYZ. *Jurnal Manajemen Dan Teknologi*, 1(1), 11-21. <https://doi.org/10.35870/jmt.v1i1.773>
- Prihandono, D. (2024). Digital transformation to enhance indonesian sme performance: exploring the impact of market competition and digital strategy. *Problems and Perspectives in Management*, 22(2), 103-113. [https://doi.org/10.21511/ppm.22\(2\).2024.09](https://doi.org/10.21511/ppm.22(2).2024.09)
- Salam, A., & Imilda. (2024). Transformasi Digital UMKM Indonesia di Era Industri 5.0: Studi Kasus di Kota Banda Aceh. *Jurnal Manajemen Dan Teknologi*, 1(1), 1-10. <https://doi.org/10.35870/jmt.v1i1.772>
- Salam, A., & Munawir, M. (2024). Utilization of Technology in Human Resource Management Optimizing Efficiency and Productivity in the Digital Era. *International Journal of Management Science and Information Technology*, 4(2), 236-245. <https://doi.org/10.35870/ijmsit.v4i2.2910>

- Sulistiyawati, U. S., & Munawir. (2024). Membangun Keunggulan Kompetitif melalui Platform E-Commerce: Studi Kasus Tokopedia. *Jurnal Manajemen Dan Teknologi*, 1(1), 43-56. <https://doi.org/10.35870/jmt.v1i1.776>
- Teng, X., Wu, Z., & Yang, F. (2022). Research on the relationship between digital transformation and performance of smes. *Sustainability*, 14(10), 6012. <https://doi.org/10.3390/su14106012>
- Vuttichat, S. (2023). Causal relationship model of marketing innovation and competitiveness of small and medium enterprises (smes) with digital technologies in thailand. *F1000research*, 12, 1040. <https://doi.org/10.12688/f1000research.138941.1>