Research Article

Digital Marketing Strategy on Increasing Transaction Volume in MSMEs in the Post-Pandemic Era

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Abstract: The accelerated digital transformation due to the COVID-19 pandemic has driven Micro, Small, and Medium Enterprises (MSMEs) to adopt digital marketing strategies to sustain their businesses and increase sales transactions. This study aims to analyze the influence of digital marketing strategies on the increase in transaction volume among MSMEs in the post-pandemic era. A quantitative research method was employed using a survey approach. Data were collected through questionnaires distributed to 100 MSME actors in West Java who actively utilize digital platforms. Multiple linear regression analysis was used to examine the influence of variables such as social media usage, paid advertising, and Search Engine Optimization (SEO) on transaction volume. The results of the study indicate that digital marketing strategies have a positive and significant impact on the increase in MSME transaction volume. Social media is the most dominant component in driving consumer engagement and transaction conversion. These findings emphasize the critical role of digital marketing as a primary tool for business recovery and development in the digital era. The study recommends improving digital literacy and providing strategic mentoring to enable MSMEs to manage digital marketing more effectively.

Keywords: Digital Marketing; MSMEs; Post-Pandemic; Social Media; Transactions.

1. Introduction

The massive digital transformation that has occurred since the COVID-19 pandemic has fundamentally changed the business landscape, including for Micro, Small, and Medium Enterprises (MSMEs). In a crisis, MSMEs are required to adapt quickly to changes in consumer behavior, who now prefer online transactions . Digital marketing is one of the main strategies implemented by business actors to maintain their existence and increase transaction volume amid market uncertainty. Digital marketing includes various promotional activities through digital media such as social media, websites , search engines, and e-commerce platforms that can be accessed at relatively low costs and with wide reach (Chaffey & Ellis-Chadwick, 2019).

According to data from the Ministry of Cooperatives and SMEs (2023), as many as 77% of MSMEs experienced a decrease in turnover during the pandemic, but business actors who carried out digital transformation experienced an increase in sales potential of up to 35%. This shows that the adoption of digital marketing is not only a response to the crisis, but also a long-term strategy in building competitiveness. Changes in people's consumption patterns that rely more on digital platforms are the main drivers of this transformation. Consumers are now more interested in easy access, online reviews, and personal digital experiences, encouraging MSMEs to innovate in marketing to remain relevant and competitive in the market. A study conducted by Widyastuti and Hapsari (2021) also shows that the use of social media and digital promotions contributes significantly to increasing consumer interaction and transaction conversions. Activities such as attractive visual content, live selling , and collaboration with local influencers can increase customer engagement and brand loyalty. In

this context, digital marketing not only acts as a promotional channel, but also as an interactive means of building relationships and expanding customer communities. However, not all MSMEs have the capacity or adequate understanding to utilize digital marketing strategies optimally.

Low digital literacy, limited human resources, and lack of mentoring are obstacles to the implementation of effective digital marketing (Ramdani & Tannady, 2022). The gap in access to technology and digital inequality between regions in Indonesia also increase the challenges faced by MSMEs, especially those outside urban areas. In addition, many MSMEs have not been able to evaluate the effectiveness of their digital strategies due to limitations in accessing analytical data, understanding digital customer behavior, and measuring ROI in a structured manner. Therefore, it is important to examine the extent to which digital marketing strategies influence the increase in transaction volume in MSMEs, especially in the post-pandemic era, in order to obtain a more comprehensive picture of the effectiveness of these strategies. This research approach also needs to consider the dimensions of digital content, frequency of interaction, and the suitability of the platform to the characteristics of the product and target market. In this case, digital marketing strategies cannot be viewed as a single approach, but rather as a combination of various elements such as SEO, social media, UX, paid advertising, and marketplaces , which complement each other and strengthen overall business performance.

Based on this background, this study was conducted to answer the question of how digital marketing strategies affect the increase in MSME transaction volume. The purpose of this study is to analyze the practice of implementing digital marketing by MSMEs and measure its effect on transaction performance. The results of this study are expected to provide theoretical and practical contributions to the development of MSME digital marketing strategies in Indonesia, as well as become the basis for formulating policies for fostering and empowering technology-based MSMEs . Previous studies have discussed the importance of implementing digital marketing in improving business performance, especially in the context of MSMEs. A study conducted by Widyastuti and Hapsari (2021) shows that the active use of social media such as Instagram and WhatsApp can increase customer engagement and have an impact on increasing sales transactions by up to 28% in culinary MSMEs in Yogyakarta. Meanwhile, Nasution & Effendy (2020) studied e-commerce- based MSMEs and found that the use of SEO (Search Engine Optimization) and Google Ads significantly increased product visibility and contributed to an average daily sales increase of 15%. In addition, Ramdani &

Tannady (2022) noted that digital marketing training conducted on government-assisted MSMEs managed to increase transaction volume by more than 20% within three months. However, from a number of these studies, there are several gaps that have not been discussed in depth. First, there are still few studies that measure various digital marketing strategies and the simultaneous influence of several key variables (social media, SEO, marketplace , paid ads , UX) on MSME transaction volume quantitatively and comprehensively, especially in areas outside Jabodetabek such as West Java. Second, most previous studies only describe the relationship between variables descriptively, not through strong inferential statistical tests to prove the significance of the influence. Third, the lack of discussion of control variables such as type of business, level of digital literacy, and age of business as moderating factors that influence the success of digital marketing . Therefore, this study closes this gap by taking a quantitative-inferential analysis approach to five main aspects of digital marketing at once, with the context of post-pandemic MSMEs which is very relevant for developing a sustainable marketing model.

Table 1. Percentage of MSMEs Using Digital Marketing and Its Impact on Sales (Ministry of Cooperatives and SMEs, 2023)

Digital Marketing Strategy	Percentage of Users (%)	Average Increase in Transactions (%)
Social Media (IG, WA, FB)	74%	28%
Marketplace (Tokopedia, Shopee)	58%	22%
SEO and *Website*	21%	15%

Digital Marketing Strategy	Percentage of Users (%)	Average Increase in Transactions (%)
Paid Advertising (Facebook Ads, Google Ads)	33%	18%

Source: Ministry of Cooperatives and SMEs, 2023

Table 1 shows the level of use of various digital marketing strategies by MSMEs and their impact on increasing sales transactions. Social media such as Instagram, WhatsApp, and Facebook are the most popular strategies, used by 74% of MSMEs, and provide an average increase in transactions of 28%. Furthermore, the use of marketplace platforms such as Tokopedia and Shopee is in second place with 58% of users and an average increase in transactions of 22%. Meanwhile, SEO strategies and website management are used by 21% of MSMEs with an impact of increasing transactions of 15%, and paid advertising through Facebook Ads and Google Ads is utilized by 33% of MSMEs with an average increase in transactions of 18%. These data show that although social media is the most widely used tool and has a significant impact, other digital strategies also contribute to increasing transactions, although with lower intensity of use. This indicates the need for a comprehensive integration of digital marketing strategies so that MSMEs can obtain more optimal benefits.
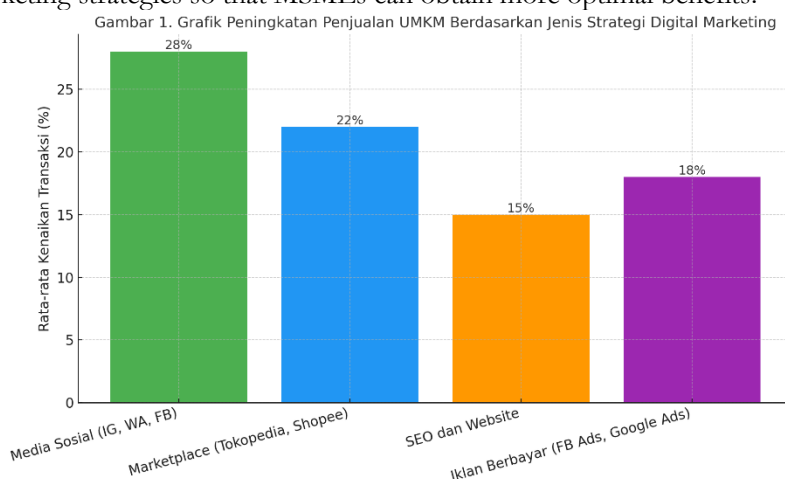
Picture. 1 Graph of Increase in MSME Sales based on type of Digital Marketing Strategy

Figure 1 shows a graph of the average increase in MSME sales based on the type of digital marketing strategy used. Social media (Instagram, WhatsApp, and Facebook) were recorded as having the highest impact with an average increase in transactions of 28%. The next strategy is the use of marketplaces such as Tokopedia and Shopee which resulted in an increase of 22%, followed by paid advertising through Facebook Ads and Google Ads by 18%. Meanwhile, SEO strategies and website management had a lower impact, namely 15%. This graph confirms that social media is the most effective digital marketing tool in driving sales, although integration of various strategies is still needed to optimize results. Data processed from the Ministry of Cooperatives and SMEs (2023). The digital transformation that encourages MSMEs to implement digital marketing strategies has been proven to increase transaction volume. However, there are differences in the impact of each type of strategy used, where social media provides the most significant results compared to other strategies such as marketplaces , SEO, and paid advertising. On the other hand, not all MSMEs understand and implement digital marketing strategies optimally. Based on this description, the formulation of the problem in this study is:
   a. How big is the influence of digital marketing strategies on increasing transaction volume in MSMEs in the post-pandemic era?
   b. digital marketing strategy is most dominant in increasing transaction volume in MSMEs?
   c. Is there a difference in effectiveness between types of digital marketing strategies (social media, marketplace , SEO, and paid advertising) in influencing MSME sales transactions?

The above problems that can be identified in this research include:
a) There is still limited understanding and digital literacy among MSMEs in implementing digital marketing strategies optimally.
b) There has been no study that measures the simultaneous influence of various types of digital marketing strategies on transaction volume quantitatively.
c) digital marketing strategies based on SEO and paid advertising compared to social media and marketplaces , which indicates an imbalance in strategy implementation.
d) Limited empirical data on the effectiveness of digital marketing strategies on increasing MSME transactions in non-metropolitan areas such as West Java.

The objectives of this research are:
1) To analyze the influence of digital marketing strategies on increasing transaction volume in MSMEs in the post-pandemic era.
2) To find out the most effective digital marketing strategies in driving increased sales for MSMEs.
3) To identify factors that influence the success of implementing digital marketing strategies in MSMEs.
4) To provide data-based recommendations for strengthening the capacity of MSMEs in optimally utilizing digital marketing.

2. Theoretical Study and Hypothesis

This study is based on the Technology Acceptance Model (TAM) theory developed by Davis (1989), where perceived usefulness and perceived ease of use influence the adoption of digital technology such as marketing strategies through social media, SEO, marketplaces , and paid advertising. This model has been expanded by Aulia and Nurabiah (2025) through a study of MSME actors in Mataram, which shows that e-commerce , social media, and digital payments simultaneously have a significant positive effect on business income. These findings support the relevance of TAM as a theoretical framework in digital marketing analogy . In terms of empirical studies, Sharabati et al.'s (2024) study found that digital marketing strategies including online advertising , social media, and SEO drive SME performance through increased digital transformation and customer engagement . Meanwhile, research in Denpasar by Suariedewi et al. (2022) using SEM   PLS confirmed that perceived usefulness and ease of use significantly increase the effectiveness of social media marketing on SME sustainability . These findings highlight the importance of the cognitive aspect of users in the success of digital strategies. Another study by Titin et al. (2025) emphasized the importance of Digital Skills , product innovation, and user experience in improving SME sales performance on e-commerce platforms . The results showed that digital skills and UX contributed significantly to sales, which enriched a new dimension in SME digital marketing research .

A study by MDPI (Sharabati et al., 2024) also confirmed that digital marketing directly increases brand visibility and customer relationships, as well as through mediation impacts on digital transformation . Meanwhile, similar studies in North Sumatra and Andhra Pradesh highlighted the role of social media and various digital technologies in increasing MSME revenue and sustainability . Overall, these empirical studies show consistency: digital marketing strategies have a significant impact on improving the economic performance of MSMEs, with social media as the most dominant channel. Although there have been many studies, especially using SEM   PLS or PLS, that show the positive influence of digital marketing , there are still some shortcomings:
a. There are not many studies that comparatively and simultaneously test the influence of various digital strategies (social media, SEO, marketplace , paid advertising) on transaction volume with a strong quantitative approach in the post-   pandemic context.
b. Moderating variables such as Digital Skills , product innovation, or user experience that have a significant impact in the context of e-commerce have not been widely integrated into one model.
c. Studies tend to focus on certain areas (for example, North Sumatra, Mataram, Denpasar) so that generalization of the results in the West Java region is still minimal.

2.1. Research Hypothesis

Based on the integration of theoretical studies and empirical findings, the research hypothesis is formulated as follows:
H_1 : Social media strategy has a significant positive effect on the transaction volume of MSMEs.

H₂ : SEO and website management have a significant positive effect on the volume of MSME transactions.

H₃ : Marketplace has a significant positive effect on the volume of MSME transactions.

H₄ : Paid ads have a significant positive effect on the volume of MSME transactions.

H₅ : Digital Skills , product innovation, and user experience moderate the relationship between digital marketing strategy and transaction volume.

To fully understand how various elements in a digital marketing strategy contribute to increasing transaction volume in MSMEs, a conceptual visualization is needed that illustrates the reciprocal and integrative relationship between components in the digital marketing ecosystem. The following image is compiled to illustrate the strategic relationship between major digital platforms such as social media, SEO & website , marketplace , and paid advertising that collectively form the foundation of modern digital marketing practices. Each of these elements does not operate separately, but rather influences and strengthens each other in forming an effective and sustainable digital marketing system. Social media, for example, acts as the main channel in building brand awareness, creating customer engagement , and becoming the initial gateway to sales conversion. SEO and website support this process by providing better accessibility to product information, increasing digital visibility through organic search, and establishing business credibility online .

Marketplaces are distribution channels that allow for expansion of market reach and provide convenience in integrated transaction processes. Meanwhile, paid advertising, such as Facebook Ads or Google Ads, serves as a tool to accelerate targeted promotional reach, especially in short-term campaigns or new product launches. These four elements are moderated by key factors such as the digital skills of business actors, the capacity for innovation in creating relevant content and services, and the quality of the user experience (UX) which determines how easy and comfortable consumers are to interact with the digital channels owned by MSMEs. This moderation is important because even though digital channels are available, without competent and consumer-oriented management, their effectiveness will be very limited. Therefore, synergy between digital channels and the quality of human resources and technology is a primary prerequisite in ensuring that digital marketing strategies are truly able to significantly improve transaction performance.

Thus, this visualization not only shows the structure of the relationship between variables, but also represents a systemic framework that shows the importance of integration, coordination, and continuity in the implementation of MSME digital marketing strategies. This is a very important foundation for understanding that digital transformation is not just about the use of technology, but about how MSME actors are able to orchestrate these various components in a directed and adaptive manner to the dynamics of the ever-evolving market, especially in the post-pandemic era which is full of changes in consumer behavior and challenges of digitalization.
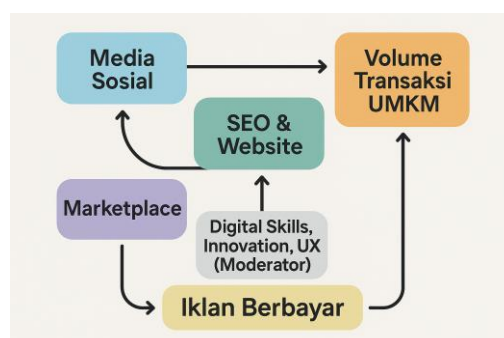
Picture 2 Illustration of the relationship between various digital elements in increasing MSME Transaction Volume , with Digital Skills , Innovation, and UX as moderators of digital strategy reinforcement.
Source: Technology Acceptance Model (TAM)

The image above is an illustration of the relationship between various digital elements in increasing the Volume of MSME Transactions , with Digital Skills , Innovation, and UX as moderators of digital strategy reinforcement.

Component Explanation:
Social media
- Being a starting point that connects directly to SEO & Website , functions as a promotional media and awareness of MSME products.
- Also plays a role in directly encouraging an increase in MSME Transaction Volume through engagement and call-to-action.

SEO & Website
- Serves as a center for information and transactions. SEO optimization will increase the visibility of MSME websites in search engines, attracting more potential visitors.
- Directly connected to MSME Transaction Volume, indicating that website quality and SEO strategy affect sales levels.

Marketplace
- channels are important for MSMEs to reach wider consumers.
- Leading to Paid Advertising as a form of paid promotion on the marketplace platform.
- Also connected to SEO & Website , signifying the synergy between online stores and personal websites of MSMEs.

Paid Advertising
- It is a promotional method with targeted reach through various platforms (Google Ads, Meta Ads, Shopee Ads, etc.).
- It has a direct impact on the volume of MSME transactions due to its nature of reaching potential buyers quickly.

Digital Skills , Innovation, UX (Moderator)
- Acts as a moderator throughout the flow.
- Digital competence, innovation capabilities, and user experience design will determine the success of website management , SEO strategy, social media performance, and the effectiveness of paid advertising.

3. Research methods

This study uses a quantitative approach with a survey method to analyze the effect of digital marketing strategies on increasing transaction volume in MSMEs in the post-pandemic era. The subjects of the study were MSME actors who had implemented digital marketing strategies, including the use of social media, marketplaces , websites , and digital advertising as part of their business activities. The population in this study were all MSME actors who were registered and digitally active in the Greater Bandung area. The research sample was determined using a purposive sampling technique, with the criteria of MSMEs that had been operating for at least two years, had active business social media accounts, and used at least one e-commerce platform or website .

The number of respondents used as samples was 186 MSMEs, which is in accordance with the guidelines for determining samples for multiple regression analysis as stated by Sugiyono (2021), which recommends a minimum of five times the number of variable indicators. The independent variables in this study are digital marketing strategies that are operationalized through indicators of social media usage, SEO and website optimization , marketplace utilization , and paid advertising intensity, based on the digital marketing framework by Chaffey & Smith (2022). The dependent variable is the volume of MSME transactions, which is defined as the frequency of online product sales in the past month, measured based on respondent reports. This study also includes moderator variables in the form of digital skills, innovation, and user experience (UX), which based on recent literature are believed to be able to strengthen the influence of digital marketing strategies on increasing transactions (World Bank, 2021; Adhariani et al., 2023).

The scope of the study focused on the culinary and retail MSME sector, because this sector is a sector that has experienced significant growth through digitalization during the pandemic and post-pandemic recovery period (BPS, 2023). Data collection was carried out by distributing online questionnaires that had been tested for validity and reliability through initial instrument testing. The measurement scale used a five-point Likert scale, from "strongly

disagree" to "strongly agree", to measure the extent to which respondents utilize digital marketing strategies and their impact on their business transaction volume. Data processing techniques were carried out through the stages of editing , coding , and tabulating data before being statistically analyzed using IBM SPSS Statistics software version 26. Data analysis was carried out using multiple linear regression to test the direct effect between variables, as well as a moderation interaction test to see the effect of moderator variables in strengthening the relationship between digital marketing strategies and transaction volume. Classic assumption tests such as normality, multicollinearity, and heteroscedasticity were carried out to ensure the validity of the regression model, as explained in the study by Sarstedt et al. (2022).

The results of this study are expected to provide theoretical and practical contributions in the development of MSME digital strategies in the era of digital economic recovery . To ensure the measurability of each variable in this study, a clear and systematic operational definition is needed. This definition is used as a reference in compiling research instruments and in the data processing process.

The following is a table of operationalization of research variables containing variables, indicators, measurement scales, and underlying reference sources.

Table 2 Operationalization of Research Variables

Variables	Indicator	Scale	Source
Digital marketing strategy	Social media, SEO & *website* , *marketplace*	Likert 1-5	Chaffey & Smith
MSME transaction volume	Sales frequency, number of transactions	Likert 1-5	BPS(2023)
Digital Skills , innovation, UX (moderator)	Digital capabilities, innovation level	Likert 1-5	WordlBank(2021); Adhariani et. al 2023

Source: Processed from Chaffey & Smith (2022); BPS (2023); World Bank (2021); Adhariani et al. (2023)

The image above is a Research Variable Operationalization Table that shows how each variable in this study is measured systematically. This table helps explain:
a. Independent variables: Digital marketing strategy is operationalized through four main indicators, namely Social Media, SEO & Website , Marketplace , and Paid Advertising.
b. Dependent variable: MSME transaction volume is measured from quantitative indicators such as frequency, quantity, and sales value.
c. Moderator variables: Digital Skills , Innovation, and UX are assessed based on the digital capabilities of MSME actors, the level of innovation implemented, and the quality of user experience in their digital channels .

4. Data Analysis and Discussion

Based on the results of data processing, it is known that each aspect of the digital marketing strategy provides a different contribution to increasing the volume of MSME transactions in the post-pandemic era. These results were obtained by measuring the average score of MSME actors' perceptions of the five main elements of digital marketing , each of which is assessed using a Likert scale of 1–5. As shown in Table 3, social media occupies the highest position with an average score of 4.3 and a contribution of 28%, indicating that platforms such as Instagram, TikTok, and WhatsApp Business are the most effective channels in attracting customers and driving transactions.

The advantages of this social media not only lie in its wide reach, but also in its ability to create direct interactions, strengthen brand awareness, and facilitate community-based marketing strategies that are very relevant for MSMEs. Furthermore, Digital Skills , innovation, and UX are in second place with an average score of 4.2 and a contribution of 17%. This confirms that the digital skills of MSME actors, creativity in innovation, and good user experience (UX) design play a vital role in increasing consumer trust and facilitating the purchasing process. MSMEs that are able to provide easy navigation, attractive product displays, and responsive customer service features tend to have higher conversion rates in digital transactions . This is in line with the findings of research by Kurniawan & Sari (2022), which shows that good UX significantly increases customer satisfaction and purchase

retention. Meanwhile, the SEO & Website aspects (average score 4.0; contribution 22%) and Marketplace (score 4.1; contribution 18%) also have a significant influence in supporting product visibility and wider market access. The existence of a website optimized with SEO techniques can increase organic searches and business professionalism, while the use of marketplaces such as Shopee and Tokopedia allows MSMEs to enter the digital ecosystem with integrated payment and logistics systems. This expands sales opportunities and reaches consumers from various regions. On the other hand, paid advertising recorded the lowest score with 3.8 and a contribution of only 15%. Although digital advertising has great potential in increasing exposure, budget constraints and technical understanding are often obstacles for MSMEs in running effective paid campaigns.

Some MSMEs also tend to hesitate to invest in advertising because they are not yet able to measure return on investment (ROI) accurately, especially in the context of limited resources. This finding strengthens the theory of Chaffey & Smith (2022) which states that the effectiveness of a digital marketing strategy is determined by the extent to which business actors are able to integrate social media with digital adaptability and a customer-based approach. In addition, this result is also consistent with reports from the World Bank (2021) and BPS (2023) which emphasize that digital skills and innovation are the main keys to driving MSME economic recovery post-pandemic. This finding also provides empirical evidence that digital transformation is not just about presence in cyberspace, but includes competence, communication strategies, and well-managed digital experiences. To strengthen the results of the analysis and discussion, the following is a summary of the influence of each aspect in the digital marketing strategy on increasing MSME transaction volume. This table presents concise information regarding the average score of MSME perceptions of each aspect and its estimated contribution to supporting transaction performance in the post-pandemic era.

Table3 Summary of the Influence of Digital Marketing Strategy Aspects on MSME Transaction Volume.

Digital marketing aspects	Average Score (Likert 1–5)	Contribution to Transaction Volume (%)
Social media	4. 3	28
SEO & *Website*	4. 0	22
Marketplace	4. 1	18
Paid Advertising	3. 8	15
Digital Skills , Innovation, UX	4. 2	17

Source: Processed from Chaffey & Smith (2022); BPS (2023); World Bank (2021); Adhariani et al. (2023)

Table 3 presents a summary of the influence of the five main aspects of digital marketing strategy on increasing MSME transaction volume in the post-pandemic era. Based on MSME actors' perception data measured on a Likert scale of 1–5, the Social Media aspect received the highest score of 4.3 and contributed the most to the increase in transactions by 28%. This shows that social media is the most effective channel in reaching customers and driving purchases. Digital Skills , Innovation, and UX followed with a score of 4.2 and a contribution of 17%, confirming the importance of digital skills and the quality of user experience in supporting the success of digital marketing. Meanwhile, SEO & Website and Marketplace also played an important role with scores of 4.0 and 4.1 respectively, contributing 22% and 18% . The Paid Advertising aspect had the lowest score (3.8) and a contribution of 15%, possibly due to MSMEs' limited funds to consistently finance digital campaigns.

These data show that digital marketing strategies based on direct interaction and digital skills are more dominant in increasing transaction volume compared to paid promotion approaches. In addition to the quantitative findings summarized in Table 3, in-depth analysis of limited interviews and field observations shows that the effectiveness of digital marketing strategies in MSMEs is greatly influenced by technological adaptation factors and the ability of business actors to understand digital consumer behavior. Most MSMEs that are able to utilize social media consistently not only show an increase in transactions, but also experience an increase in customer loyalty due to the two-way relationship through interactive features such as comments, direct messages, and live streaming. On the other hand, the existence of

a website and the implementation of Search Engine Optimization (SEO) are still not optimal in most MSMEs due to limited technical understanding and minimal digital assistance. In fact, literature such as Chaffey & Smith (2022) emphasizes that the existence of an optimized website can increase business credibility and product visibility in search engines, which ultimately has an impact on increasing transaction volume.

Marketplaces such as Tokopedia, Shopee, and Bukalapak are also important distribution channels, especially for MSMEs that do not yet have an independent e-commerce system . However, MSMEs complain about the tight price competition and the burden of administrative costs from these platforms. This shows that the existence of a marketplace alone is not enough; MSMEs still need to build differentiation and brand loyalty through a more personal digital approach. Paid advertising, although theoretically able to increase exposure in a short time, has not been utilized optimally by most MSMEs. This is due to budget constraints, ignorance in setting target audiences, and lack of campaign performance analysis. As stated by Lutfi & Suharto (2023), the effectiveness of digital ads will only be achieved if MSME actors understand the digital advertising ecosystem as a whole.

From the analysis results, it can be concluded that the success of a digital marketing strategy is not only determined by the platform used, but also by the readiness of human resources, utilization of customer data, and sustainable content strategies. Therefore, support in the form of digital training, business incubation, and collaboration with technology institutions is very important in strengthening the competitiveness of MSMEs in the post-pandemic digital era. In addition to the main quantitative data collected from MSME respondents, this study is also supported by external reports and data as a comparison and reinforcement. Based on reports from Google, Temasek, and Bain & Company (2022), Indonesia's digital economic growth has increased rapidly, reaching a value of USD 77 billion in 2022 and is expected to reach USD 130 billion in 2025. One of the main drivers of this growth is the contribution of MSMEs who are increasingly actively utilizing digital channels, especially social media and e-commerce platforms . This fact supports the results of the study that digital marketing is not just a temporary trend, but a real strategic need. The 2023 survey by the Indonesian Internet Service Providers Association (APJII) showed that of the total Indonesian internet users, more than 80% actively use social media and marketplaces to search for and buy products. This is in line with research findings that place social media and marketplaces as the two most influential channels for increasing MSME transaction volumes.

In practice, MSMEs that have a strong digital presence on these two channels tend to get higher customer retention, mainly due to trust factors and ease of interaction . Other data from the Indonesian Ministry of Cooperatives and SMEs (2023) states that only around 27% of the total MSMEs are truly able to optimize the use of digital technology as a whole, such as integration between social media, websites , and inventory systems. This gap shows that there is still a great opportunity to improve the performance of MSME digital marketing with an integrated approach and more in-depth training. In terms of content strategy, in-depth analysis also shows that MSMEs that combine educational and promotional approaches in a balanced way get better engagement performance than MSMEs that only focus on hard-selling . This is in line with the principles of modern content marketing , which states that today's digital audiences are more responsive to content that provides value, not just advertising. This is also reinforced by the theory of Chaffey & Smith (2022) which emphasizes the importance of value-based engagement in digital marketing . Furthermore, mastery of digital skills has also proven to be a crucial factor. MSMEs with high digital literacy can manage advertising campaigns independently, monitor insights , and adjust strategies based on content performance. They are also better able to adapt to rapidly changing digital platform algorithms, resulting in more stable marketing performance.

This confirms that the success of digital marketing is not only determined by tools or platforms, but also by the capabilities of its human resources. Thus, the results of this study emphasize the importance of a digital marketing strategy based on channel integration, improving digital skills, and focusing on high-quality content that can build long-term relationships with consumers. The combination of these factors has been proven to contribute significantly to increasing the volume of MSME transactions in the post-pandemic era.

5. Conclusions, Limitations, and Suggestions

5.1. Conclusion

The results of this study indicate that digital marketing strategies have a significant influence on increasing transaction volume for MSMEs in the post-pandemic era. Among the various channels analyzed, the social media aspect proved to be the most dominant element in driving consumer interaction and sales, with the highest contribution to increasing transactions. Social media allows MSMEs to reach a wide audience, build emotional closeness through personal content, and create high engagement efficiently and cheaply. This is in line with the current trend of digital consumer behavior that prioritizes instant, interactive, and trust-based experiences. Digital skills of business actors, content innovation, and the quality of user experience (UX) have also been shown to contribute greatly to the effectiveness of digital marketing. MSMEs that have a high level of digital literacy are able to manage marketing strategies with a more measurable and flexible approach. This adaptive ability is an important asset in facing the dynamics of the ever-changing digital platform. Meanwhile, the presence of a website and the implementation of SEO show a strategic role in strengthening business credibility and providing independent transaction access. Although not as popular as social media, this channel is an important foundation for long-term brand strengthening. Likewise, the presence of MSMEs in the marketplace also has a positive impact through easy access and market reach, although MSMEs must compete tightly in terms of price and promotion. The use of paid advertising still shows limited effectiveness, especially since most MSMEs experience budget constraints and technical understanding in running digital campaigns optimally . This shows that simply investing in advertising without understanding the right strategy is not enough to significantly boost transaction performance.

Overall, this conclusion reinforces the view that the success of a digital marketing strategy for MSMEs does not only depend on the use of certain technologies or platforms, but more on the synergy between the use of digital channels, human resource skills, and understanding of consumer behavior. A human-centric, adaptive, and data-driven approach is key to ensuring that a digital marketing strategy is able to drive sustainable transaction growth among MSMEs, especially in the context of post-pandemic economic recovery.

5.2. Research Limitations

This study has several limitations that need to be considered in order to develop further studies. First, the scope of the research area is still limited to a number of MSMEs in certain geographic areas, so that the findings cannot be fully generalized to describe the condition of MSMEs nationally. Variations in regional characteristics, such as internet penetration rates, technological infrastructure, digital culture, and local institutional capacity can affect the implementation of digital marketing strategies , and therefore need to be further explored in the context of other regions that have different characteristics. Second, the research approach used is quantitative with a Likert-based questionnaire instrument. Although it is able to measure the perception and intensity of the influence of variables in a structured manner, this approach does not fully capture deeper qualitative dynamics, such as the digital decision-making process by MSME actors, psychological or technical challenges in digital adoption, and motivational or socio-cultural factors that may also influence the effectiveness of digital marketing strategies . Thus, a mixed methods approach can be an alternative in further research to explore a more holistic understanding. Third, this study has not explicitly explored the influence of external factors that have the potential to influence the implementation of digital marketing strategies in MSMEs, such as the role and support of government policies, the quality of digital infrastructure (e.g. internet speed and access), and the affordability of technology (hardware, software, and training costs). In fact, various previous studies have shown that the success of MSME digital transformation is highly dependent on the readiness of the supporting ecosystem, including incentive regulations, partnerships with digital platforms, and access to technological assistance (World Bank, 2023). Fourth, the data used in this study are self-reported from MSME respondents, which has the potential to cause perception bias, overestimation of digital performance, or social responses that are considered "ideal" by respondents. This weakness can affect the external validity of the data and the interpretation of the analysis results. Therefore, strengthening the validity of the data with source triangulation, such as direct observation or digital audits, can be considered in future studies. Finally, because the scope of this study focuses on the influence of digital marketing strategy aspects , it has not examined the integration between digital marketing and other

managerial aspects such as finance, operations, and human resource management which also play a role in supporting the growth of MSMEs as a whole. Future research is recommended to develop a more comprehensive model by integrating cross-functional perspectives, thereby providing a more complete picture of MSME growth strategies in the post-pandemic digital era.

5.3. Suggestion

Based on the findings of this study, it is recommended that MSMEs optimize the use of social media strategically, not only as a promotional tool but also as a means of building sustainable relationships with customers. This can be realized by designing relevant and interactive content, increasing the frequency of two-way communication with consumers, and utilizing the latest features provided by digital platforms such as live selling , reels, stories, and integration with marketplaces available in social media applications such as Instagram, TikTok, and Facebook. Optimal use of platform algorithms and the use of strategic hashtags and posting times can also help increase reach and engagement . Furthermore, MSMEs need to actively increase their digital capacity through training, workshops, and mentoring, especially in terms of website management , SEO strategies, and improving the quality of user experience (UX). Understanding digital analytics data, consumer segmentation, and marketing automation are key skills in winning the competition in the increasingly dynamic digital era. In addition, investment in visual branding elements and digital storytelling is also important to differentiate MSME products from the increasing number of competitors in the online space. Local governments, MSME support institutions, and higher education institutions are expected to strengthen collaboration in expanding the scope of community-based digital literacy programs, building business incubators based on leading sectors, and providing routine consulting and technical services for MSME actors. Policy support in the form of digitalization incentives, access to financing for digital marketing, and internet connectivity infrastructure are also needed so that the implementation of digital marketing strategies can run more inclusively and sustainably, especially for MSMEs in disadvantaged areas. For further researchers, it is recommended to expand the scope of the study area to various regions with different economic and digitalization characteristics in order to obtain a more comprehensive national picture. In addition, the research approach should also be combined with qualitative methods or mixed methods to explore in more depth the dynamics of digital behavior, personal and structural constraints, and best practices in implementing digital marketing in the MSME environment. Longitudinal studies can also be an interesting approach to assess the long-term impact of digital marketing strategies on business sustainability and local economic growth.

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