



Research Article

Entrepreneurial Marketing in the Digital Ecosystem : The Influence of E-commerce Platforms on the Growth of MSMEs in the Post-Pandemic Era

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Abstract: This study examines the influence of e-commerce platforms on the growth of MSMEs in the post-pandemic era, focusing on the implementation of entrepreneurial marketing strategies in the digital ecosystem. This research aims to understand how e-commerce platforms help MSMEs in developing more adaptive and effective marketing strategies amid changes in consumer behavior post-pandemic. The method used is a quantitative approach with Structural Equation Modeling (SEM) to analyze the direct and indirect relationship between the use of e-commerce platforms, entrepreneurial marketing strategies, and the growth of MSMEs. The main findings show that the use of e-commerce platforms has a significant effect on entrepreneurial marketing strategies, which in turn encourages the growth of MSMEs. This research contributes to the literature on MSME digitalization, particularly in the context of post-pandemic recovery, and shows how e-commerce platforms can be an important enabler for MSMEs to survive and thrive amid changing market challenges. The urgency of this research lies in its contribution in providing insights into the implementation of innovative digital marketing strategies, which is highly relevant for MSMEs trying to adapt to the post-pandemic business landscape.

Keywords: Business Growth, Digitalization, E-commerce, Entrepreneurial Marketing, MSMEs.

1. Introduction

The rapid growth of digital technologies has profoundly reshaped the business landscape, particularly in the way enterprises operate and interact with customers. Among these transformations, the rise of e-commerce platforms has played a pivotal role in the growth of Small and Medium Enterprises (SMEs), also known as MSME'Ss (Usaha Kecil dan Menengah) in many parts of the world [1], [2], [3]. These platforms have enabled MSME'Ss to expand their market reach, access new customer segments, and utilize innovative marketing strategies that were once the exclusive domain of larger corporations [4]. However, the post-pandemic era presents a new set of challenges and opportunities that necessitate a closer examination of how MSME'Ss can effectively leverage these digital tools to foster sustainable growth. This study explores the role of entrepreneurial marketing in the digital ecosystem, with a particular focus on the influence of e-commerce platforms on the growth of MSME'Ss in the post-pandemic world.

Entrepreneurial marketing, as a field of study, combines the dynamic and innovative strategies typically associated with entrepreneurship with the more structured marketing frameworks traditionally used by firms [5], [6]. In the digital ecosystem, entrepreneurial marketing takes on new dimensions, with firms relying heavily on digital tools, platforms, and data analytics to drive decision-making and innovation. The concept of entrepreneurial marketing in the digital ecosystem is not merely about utilizing traditional marketing tactics; rather, it encompasses a mindset that prioritizes agility, customer engagement, and the capacity to adapt to rapidly changing digital landscapes. In this context, e-commerce

Received: March 31th, 2025

Revised: April 14th, 2025

Accepted: April 28th, 2025

Online Available: April 30th, 2025

Curr. Ver.: April 30th, 2025



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platforms emerge as crucial enablers, allowing MSME'Ss to engage with customers directly, collect valuable consumer insights, and adjust their marketing strategies in real-time [7], [8]. These platforms serve as bridges between MSME'Ss and the broader digital marketplace, providing a cost-effective means for firms to scale their operations and enhance their market presence.

The post-pandemic recovery period presents a unique set of challenges for MSME'Ss, particularly in their ability to adapt and thrive in an increasingly digitalized economy. The COVID-19 pandemic accelerated the digital transformation of businesses, and for many MSME'Ss, this transformation was not optional but essential for survival. As the global economy begins to recover, MSME'Ss must navigate a complex environment characterized by changing consumer behavior, shifts in market demand, and the ongoing challenges of maintaining operational efficiency in a disrupted world. One of the most significant challenges faced by MSME'Ss in the post-pandemic era is the need to reinvent their marketing strategies. Traditional marketing approaches are no longer sufficient, and MSME'Ss must adopt digital-first strategies to remain competitive [9], [10]. E-commerce platforms, with their robust digital marketing capabilities, offer a potential solution to this problem, providing MSME'Ss with the tools necessary to adapt their marketing efforts and engage effectively with customers in the digital space.

Despite the growing importance of digital transformation for MSME'Ss, there remains a significant gap in the literature concerning the specific role of e-commerce platforms in post-pandemic recovery. While several studies have examined the broad impact of digital technologies on SMEs, few have focused specifically on the post-pandemic era, where digital tools have become even more critical to business survival and growth. Furthermore, existing research tends to overlook the unique challenges faced by MSME'Ss in adapting their marketing strategies to digital environments, particularly in the context of e-commerce platforms. This gap is particularly evident in studies addressing the relationship between entrepreneurial marketing and digital ecosystems in the post-pandemic era [7], [11]. Therefore, this study aims to fill this gap by providing a detailed examination of how e-commerce platforms influence the growth of MSME'Ss in the post-pandemic world, emphasizing the role of entrepreneurial marketing strategies in driving digital transformation.

The rapid adoption of e-commerce has led to significant changes in how businesses, particularly MSME'Ss, approach their marketing and customer engagement. E-commerce platforms offer MSME'Ss unprecedented opportunities to reach global markets, access diverse customer segments, and implement marketing strategies that are agile and data-driven [12]. Recent developments in e-commerce have introduced a wide range of tools and features, including customer relationship management (CRM) systems, personalized marketing, and data analytics, which enable MSME'Ss to tailor their marketing efforts to specific customer needs [8], [13]. These platforms also facilitate direct communication between businesses and consumers, enabling MSME'Ss to build stronger relationships with customers and gather real-time feedback. In the post-pandemic era, where digital interactions are often preferred over physical ones, the ability of MSME'Ss to leverage these platforms effectively can determine their success in the marketplace [6], [11].

The novelty of this study lies in its focus on the post-pandemic context, where the digital marketing landscape is rapidly evolving. While much research has been done on the role of e-commerce platforms in the growth of MSME'Ss, there has been limited attention given to how these platforms specifically support post-pandemic recovery [14], [15]. By focusing on the unique challenges faced by MSME'Ss in this new era, this study aims to contribute to the understanding of the specific relationship between e-commerce platforms and MSME'S growth. This research offers a fresh perspective on how MSME'Ss can utilize entrepreneurial marketing strategies in the digital ecosystem to foster sustainable growth and resilience in the face of ongoing economic uncertainty.

The primary objective of this study is to investigate the role of e-commerce platforms in enhancing the growth of MSME'Ss in the post-pandemic era. This includes examining how these platforms can be leveraged by MSME'Ss to improve their marketing strategies, reach new customer bases, and drive business innovation [16]. The study also seeks to highlight the importance of entrepreneurial marketing as a tool for MSME'Ss to navigate the digital landscape, emphasizing the need for agility, proactivity, and customer-focused strategies [5], [8]. By addressing the challenges and opportunities presented by e-commerce platforms, this study will provide valuable insights into how MSME'Ss can successfully navigate the post-pandemic business environment and thrive in the digital economy.

In conclusion, this study contributes to the growing body of literature on entrepreneurial marketing by focusing on the digital transformation of MSME'Ss in the post-pandemic world. By investigating the role of e-commerce platforms in supporting MSME'S growth, this research will provide actionable insights for business owners, policymakers, and academics alike[17]. It will also contribute to a deeper understanding of the complex relationship between digital tools, marketing strategies, and business performance in the post-pandemic economy.

2. Literature Review

2.1. Theory

Entrepreneurial marketing (EM) has gained significant attention in both academic and practical realms, particularly in the context of small and medium-sized enterprises (SMEs), or MSME'Ss, navigating an increasingly competitive global market[18]. EM is a dynamic and innovative approach that integrates entrepreneurial behaviors such as opportunity recognition, risk-taking, proactivity, and customer focus with traditional marketing strategies. This approach is particularly relevant in the digital ecosystem, where businesses must leverage technological advancements and e-commerce platforms to thrive. EM in the digital age has become synonymous with agility, innovation, and resourcefulness, all crucial for the success of MSME'Ss, especially during and after the challenges posed by the COVID-19 pandemic [5], [6].

Theories on entrepreneurial marketing emphasize the strategic behaviors of entrepreneurs in leveraging limited resources to gain a competitive edge, primarily through innovative and customer-driven approaches[19], [20]. Morris outlined key dimensions of EM, including innovation, proactivity, opportunity recognition, customer intensity, and risk management, which are foundational to understanding how MSME'Ss can utilize digital tools, such as e-commerce platforms, to enhance their marketing strategies. Through the lens of EM theory, it is clear that e-commerce platforms enable MSME'Ss to harness new opportunities, engage with customers, and innovate in ways that traditional marketing strategies might not allow [5].

The shift towards digital marketing and the widespread adoption of e-commerce platforms have reshaped the marketing landscape. Digital marketing theories explore how businesses can use online channels, social media, and e-commerce platforms to create value and engage customers in meaningful ways[21]. The adoption of e-commerce platforms has been a key driver of digital transformation in many MSME'Ss, particularly as these platforms provide access to vast markets, reduce the cost of entry, and offer tools for personalized marketing [7]. E-commerce platforms serve as crucial enablers of entrepreneurial marketing by offering a space for MSME'Ss to interact with customers, gather feedback, and refine their strategies to be more market-responsive. These platforms are not just sales channels but also sources of data and customer insights, empowering MSME'Ss to craft targeted marketing campaigns and adapt their business models in real-time [9].

Theories related to digital marketing and e-commerce adoption further emphasize the importance of these platforms in the post-pandemic era[22]. The rapid digitalization triggered by the COVID-19 pandemic has made it clear that businesses must adapt quickly to the digital environment to survive and grow. E-commerce adoption theory explores the factors that influence firms' decision to adopt online platforms, including perceived benefits, ease of use, cost, and external pressures [8]. For MSME'Ss, e-commerce platforms have provided a lifeline, offering the tools needed for digital marketing, customer relationship management, and operational efficiency. However, the successful adoption of these platforms depends on the firms' capacity to integrate them into their entrepreneurial marketing strategies, leveraging the digital ecosystem to foster growth [8].

In this context, innovation diffusion theory provides a valuable framework for understanding how technological innovations, such as e-commerce platforms, are adopted by MSME'Ss and how these platforms contribute to business growth. Innovation diffusion theory, initially developed by Rogers [23], posits that innovations spread through social systems in stages, with early adopters leading the way before broader acceptance. The application of this theory to e-commerce adoption by MSME'Ss highlights how early adopters of e-commerce platforms often experience significant competitive advantages, gaining access to global markets, customer data, and marketing tools that enhance their business performance[24], [25]. The theory also emphasizes that the rate of adoption can be influenced

by factors such as organizational readiness, perceived value, and the ability to integrate digital tools into existing business processes [13].

2.2 Empirical Studies

Given the growing importance of e-commerce in the digital ecosystem, the following hypotheses are proposed based on the existing literature and theoretical frameworks:

H1: The use of e-commerce platforms (X) has a positive effect on the growth of MSME'Ss (Y). This hypothesis is grounded in the view that e-commerce platforms offer MSME'Ss a means to expand their market reach, enhance operational efficiency, and engage with customers in more personalized and impactful ways. As EM theory suggests, these platforms empower MSME'Ss to innovate and respond proactively to market demands, leading to growth [5], [7].

H2: The use of e-commerce platforms (X) has a positive effect on entrepreneurial marketing strategies (Z). E-commerce platforms are not just sales channels; they provide data-driven insights that enable MSME'Ss to refine their marketing strategies, personalize their offerings, and increase customer engagement. This aligns with the notion of entrepreneurial marketing, which emphasizes the importance of leveraging technology and innovation to enhance customer relationships and create value [6], [8].

H3: Entrepreneurial marketing strategies (Z) have a positive effect on the growth of MSME'Ss (Y). Entrepreneurial marketing strategies are essential for driving growth in resource-constrained environments like MSME'Ss. These strategies, focused on innovation, opportunity recognition, and customer engagement, are critical for business expansion and long-term sustainability [5], [13].

H4: The use of e-commerce platforms (X) has a positive effect on the growth of MSME'Ss (Y) through entrepreneurial marketing strategies (Z) as a mediating variable. This hypothesis builds on the idea that e-commerce platforms are not just tools for reaching customers but also platforms for driving innovation in marketing strategies. By integrating e-commerce platforms into their entrepreneurial marketing strategies, MSME'Ss can optimize their growth potential [7], [8].

H5: The post-pandemic era (M1) moderates the relationship between the use of e-commerce platforms (X) and the growth of MSME'Ss (Y). The global pandemic has led to significant changes in consumer behavior and market dynamics, making digital marketing and e-commerce adoption more urgent than ever. As the world adjusts to a new normal, the impact of e-commerce on MSME'S growth is likely to be amplified by the increased reliance on digital tools and platforms [10], [26].

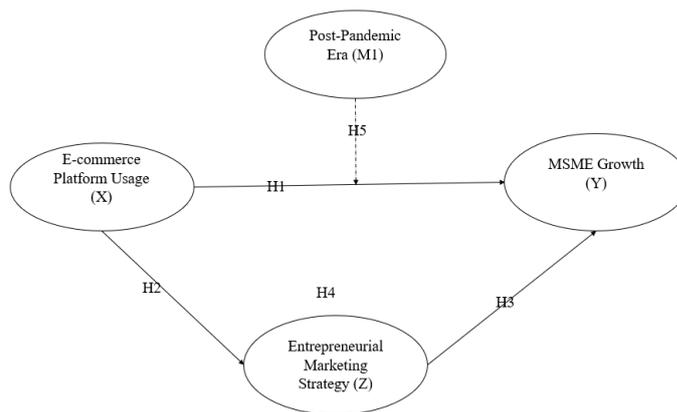


Figure 1. Konseptual Frame Work

This study aims to explore these hypotheses in the context of MSME'Ss, shedding light on the critical role of e-commerce platforms in the post-pandemic recovery. By focusing on the relationship between e-commerce adoption, entrepreneurial marketing, and business growth, this research will provide valuable insights for MSME'Ss seeking to leverage digital tools for sustainable growth and competitive advantage in the digital ecosystem.

3. Proposed Method

This study adopts a quantitative research design to investigate the relationship between the use of e-commerce platforms, entrepreneurial marketing strategies, and the growth of Micro, Small and Medium Enterprises (MSMEs) in the post-pandemic era. This study aims to analyze how SMEs, especially those operating in the Greater Malang region, utilize e-commerce platforms to drive their marketing strategies and business growth. The quantitative approach is appropriate for this study because it allows the collection of numerical data that can be analyzed to establish relationships and measure the strength of effects between the variables being investigated [27]. The time frame for the study was from January to March, capturing data from SMEs as they continue to adjust to the changing business landscape after the COVID-19 pandemic. The population of this study consists of MSMEs in the Greater Malang area, especially those who use e-commerce platforms as part of their business operations. These MSMEs are involved in various sectors, including retail, services, manufacturing, and hospitality, reflecting the diversity of the business environment in Greater Malang. Samples were taken from a subset of MSMEs across a wide range of industries and business sizes to ensure a broad representation of the local entrepreneurial ecosystem. For sampling, a stratified random sampling technique is used, which divides the population into different strata based on the type and size of the industry. This approach ensures that each sector and size of business is proportionally represented in the sample, allowing for a more accurate analysis of the effect of using e-commerce platforms on SME growth. Graded random sampling is particularly useful in heterogeneous populations, where certain subgroups may differ significantly from each other [28]. In this study, 257 data were obtained that met the criteria for analysis. In this study, strata include business sectors (e.g., retail, manufacturing, services) and the size of micro, small enterprises, which are key factors influencing the adoption of e-commerce and entrepreneurial marketing strategies.

Table 1. Variable Measurement

No	Variable	Indicator	Statement Items	Code
1	E-commerce Platform Usage (X) Eggers et al., (2019)	Frequency of Use	1. How often do you use an e-commerce platform to sell products?	EPUX1
			2. How often do you update your products or services on an e-commerce platform?	EPUX2
			3. How many e-commerce platforms do you use for business?	EPUX3
		Number of Platforms Used	4. Which e-commerce platform do you use most often to reach customers?	EPUX4
			5. What are the main functions of the e-commerce platform you use? (e.g., sales, promotions, customer service)	EPUX5
2	Entrepreneurial Marketing Strategy (Z) Morris (2002); Stokes, (2000)	Inovasi	1. Do you often create or introduce new products to meet unmet market needs?	EMZ1
			2. To what extent does your product or service innovation contribute to business growth?	EMZ2
			3. How often do you create new market opportunities or respond quickly to market changes?	EMZ3
		Proactivity	4. Are you actively looking for opportunities that can increase your business's profitability?	EMZ4
			5. To what extent are you able to recognize business opportunities that can be exploited with e-commerce platforms?	EMZ5
		Introduction of Opportunities		

No	Variable	Indicator	Statement Items	Code
3	MSME Growth (Y) Sadiku (2019) Kraus (2010)	Customer Engagement	6. How often do you interact directly with customers through an e-commerce platform to understand their needs?	EMZ6
		Financial Performance	1. How much of an increase in revenue have you achieved since using the e-commerce platform?	MGY1
			2. To what extent has your profit or profit margin increased since using an e-commerce platform?	MGY2
			3. How much has your business's market share increased after joining an e-commerce platform?	MGY3
			4. To what extent has an e-commerce platform helped you expand your market reach?	MGY4
Customer Base	5. Have you noticed an increase in the number of new customers after joining the e-commerce platform?	MGY5		
4.	Post-Pandemic Era (M) Pittz (2019)	The Impact of the Pandemic on Business	1. Has the COVID-19 pandemic affected the way you use e-commerce platforms?	PPEM1
			2. To what extent are you adapting to the changes brought about by the pandemic in your marketing and sales strategies?	PPEM2

Source: Processed data 2025

For data analysis, this study employs Structural Equation Modeling (SEM) with Partial Least Squares (PLS). SEM-PLS is particularly suited for exploratory research and is a robust technique for examining complex relationships among multiple variables, making it ideal for this study [29], [30]. PLS-SEM allows for the analysis of both the direct and indirect effects between variables, which is crucial for understanding the pathways through which e-commerce platform usage influences MSME'S growth, particularly via entrepreneurial marketing strategies. The SEM-PLS approach will test the hypotheses by evaluating the structural model and the relationships between the latent variables, including the mediating effect of entrepreneurial marketing strategies on the relationship between e-commerce platform usage and MSME'S growth. The measurement model will first be assessed for reliability and validity, followed by the analysis of the structural model to examine the proposed causal relationships.

4. Results and Discussion

In this study, the sample consists of 257 MSME owners who use e-commerce platforms in the post-pandemic era. The demographic data shows that the majority of respondents are male (54.5%), with the largest age group being 26-35 years old (33.8%), followed by 18-25 years old (23.4%) and 36-45 years old (22.1%). Regarding education, most respondents have completed a bachelor's degree (44.2%), followed by high school graduates (26%) and those with a diploma (13%). In terms of business sectors, the majority of respondents are involved in trade and services (51.9%), followed by manufacturing (31.2%) and technology/start-up sectors (9.1%). Regarding online sales experience, the majority of respondents have over two years of experience, with 28.6% having 2-3 years of experience and 27.3% having more than five years. The most commonly used e-commerce platforms are Tokopedia (39%), followed by Bukalapak (26%) and Shopee (20.8%). Regarding monthly income, the majority of respondents earn between IDR 5,000,000 and IDR 10,000,000 (33.8%), while 31.2% earn less than IDR 5,000,000, and 14.3% earn more than IDR 20,000,000. These demographic characteristics provide a comprehensive overview of the MSME owners involved in the study

and offer valuable context in understanding the impact of e-commerce platforms on MSME growth in the post-pandemic era.

Table 2. Result Of Validity and Reliability Tests

Variables	Indikator	Validity Test			Reliability Test		
		Outer Loading	AVE	Decision	Cronbach's Alpha	Composite Reliability	Decision
E-commerce Platform Usage (X)	EPUX1.1	0.708		Valid	0.828	0.838	Reliable
	EPUX1.2	0.740		Valid			
	EPUX1.3	0.808	0.591	Valid			
	EPUX1.4	0.796		Valid			
	EPUX1.5	0.788		Valid			
Entrepreneurial Marketing Strategy (Z)	EMZ1.1	0.792		Valid	0.888	0.888	Reliable
	EMZ1.2	0.815		Valid			
	EMZ1.3	0.835	0.642	Valid			
	EMZ1.4	0.846		Valid			
	EMZ1.5	0.770		Valid			
	EMZ1.6	0.745		Valid			
MSME's Growth (Y)	MGY1.1	0.858		Valid	0.908	0.912	Reliable
	MGY1.2	0.892		Valid			
	MGY1.3	0.862	0.732	Valid			
	MGY1.4	0.871		Valid			
	MGY1.5	0.791		Valid			
Post-Pandemic Era (M)	PPEM1.1	0.837	0.756	Valid	0.707	0.717	Reliable
	PPEM1.2	0.901		Valid			

Source: Processed data 2025

Table 2 above presents the results of the validity and reliability test of several variables used in the study. The variables tested included E-commerce Platform Usage (X), Entrepreneurial Marketing Strategy (Z), MSME's Growth (Y), and Post-Pandemic Era (M), each of which had several indicators to measure these variables. For example, for the E-commerce Platform Usage variable, the indicators used include EPUX1.1, EPUX1.2, and so on. The test results showed that the outer loading value for all indicators was above 0.7, which indicates that these indicators have a strong relationship with the variables being measured. In addition, the Average Variance Extracted (AVE) value also indicates that these variables are valid, with an AVE value greater than 0.5. For example, Ecommerce Platform Usage has an AVE value of 0.591, which indicates its validity. The validity decision indicates that all the indicators tested are considered valid, which means that they can accurately describe the variables. Furthermore, the results of the reliability test showed that all variables had Cronbach's Alpha and Composite Reliability values greater than 0.7, indicating that the constructs were reliable. All variables in this table are labeled Reliable, which indicates that they meet the criteria for good reliability.

Table 3. Result of HTMT Ratio

	E-Commerce Platform Usage (x)	Entrepreneurial Marketing Strategy (Z)	MSME's Growth (Y)	Post-Pandemic Era (M)	Post-Pandemic Era (M) x E-Commerce Platform Usage (x)
E-Commerce Platform Usage (x)					
Entrepreneurial Marketing Strategy (Z)	0.600				
MSME's Growth (Y)	0.422	0.719			

Post-Pandemi Era (M)	0.420	0.672	0.794	
Post-Pandemi Era (M) x E-Commerce Platform Usage (x)	0.200	0.195	0.076	0.129

Source: Processed data 2025

Table 3 above presents the results of the HTMT Ratio (Heterotrait-Monotrait Ratio) test which is used to test the discriminative validity between the variables involved in the study. HTMT is a measure that helps assess the extent to which two constructs or variables are related to each other. If the HTMT value is lower than 0.85, then the variables are considered to have good discriminant validity, which means that there is no significant overlap between the variables. In this table, there are several pairs of variables tested, namely E-Commerce Platform Usage (x), Entrepreneurial Marketing Strategy (Z), MSME's Growth (Y), Post-Pandemic Era (M), and the interaction between Post-Pandemic Era (M) and E-Commerce Platform Usage (x). The results of the HTMT test showed that the values obtained for the pair of variables were all lower than 0.85, which suggests that the discriminating validity between the variables is not problematic. For example, the HTMT value between E-Commerce Platform Usage (x) and Entrepreneurial Marketing Strategy (Z) is 0.600, which indicates a moderate relationship, but still within acceptable limits. The same goes for other variable pairs, such as between E-Commerce Platform Usage (x) and MSME's Growth (Y) (HTMT value 0.422), as well as between E-Commerce Platform Usage (x) and Post-Pandemic Era (M) (HTMT value 0.420), all of which show valid and non-overlapping relationships. In addition, the very low HTMT values between the Post-Pandemic Era (M) and E-Commerce Platform Usage (x) interactions (0.200), as well as other variable pairs, suggest that there is no problem with the discriminant validity between them. Overall, this table shows that all of the variable pairs tested had good discriminant validity, with HTMT values lower than 0.85, which indicates no serious problems in the relationships between the variables tested.

Table 4. Result of Fornell-Larcker Criterion

	E-Commerce Platform Usage (x)	Entrepreneurial Marketing Strategy (Z)	MSME's Growth (Y)	Post-Pandemi Era (M)
E-Commerce Platform Usage (x)	0.769			
Entrepreneurial Marketing Strategy (Z)	0.523	0.801		
MSME's Growth (Y)	0.378	0.651	0.855	
Post-Pandemi Era (M)	0.324	0.526	0.634	0.870

Source: Processed data 2025

Table 4 shows the results of the Fornell-Larcker Criterion test, which is used to test the validity of discriminators in structural models. This test assesses whether the Average Variance Extracted (AVE) value of each construct is greater than the correlation between the construct and the other constructs. If the AVE is greater than the correlation between the constructs, then the construct can be considered to have good discriminant validity. The results shown in this table show that all variables in this study have good discriminant validity. E-Commerce Platform Usage (x), with an AVE of 0.769, had a lower correlation with other variables, namely 0.523 with Entrepreneurial Marketing Strategy (Z), 0.378 with MSME's Growth (Y), and 0.324 with Post-Pandemic Era (M), all of which were lower than their AVE values. Entrepreneurial Marketing Strategy (Z) has an AVE of 0.801 and a correlation of 0.651 with MSME's Growth (Y), and 0.526 with the Post-Pandemic Era (M), both of which are still lower than their AVE. MSME's Growth (Y) has an AVE of 0.855, which is greater than the correlation with the Post-Pandemic Era (M), which is worth 0.634. Meanwhile, the Post-Pandemic Era (M), with an AVE of 0.870, also shows a higher value compared to its correlation with other variables. Overall, the results of the Fornell-Larcker Criterion test show that each variable in this model has an AVE greater than the correlation value between the variables, which means that all constructs in this study have good discriminant validity. Thus, the tested model is acceptable and ready for use for further analysis.

Table 5. Evaluation of Goodness of Fit Criteria

	Saturated model	Estimated model
SRMR	0.073	0.106
d_ULS	0.904	1.935
d_G	0.418	0.483
Chi-square	613.315	638.665
NFI	0.787	0.778

Source: Processed data 2025

Table 5 shows the results of the evaluation of the Goodness of Fit Criteria for the model used in the study, which compares the Saturated model with the Estimated model. This evaluation aims to assess how well the proposed model can match existing data, using several criteria recognized in statistical analysis. First, the SRMR (Standardized Root Mean Square Residue) value for the Saturated model is 0.073, while for the Estimated model is 0.106. A lower SRMR value indicates that the Saturated model has a better match to the data, as the ideal SRMR value is typically less than 0.08. A higher value on the Estimated model indicates a slight decrease in the model's match to the data. Furthermore, the d_ULS (Unweighted Least Squares Distance) value for the Saturated model is 0.904, which is lower than the Estimated model which has a value of 1.935. Smaller d_ULS values indicate that the Saturated model is better at matching data without overloading the model with irrelevant parameters. For d_G (Geodesic Distance), the Saturated model has a value of 0.418, while the Estimated model has a value of 0.483. The smaller values on the Saturated model also indicate that it is better suited to approach the data based on geodesic distance criteria. In the Chi-square test, the Saturated model yielded a value of 613,315, while the Estimated model had a value of 638,665. A lower Chi-square value indicates that the Saturated model is better in terms of the model's suitability with the data, as the better model usually has a lower Chi-square value. Finally, for NFI (Normed Fit Index), the Saturated model shows a value of 0.787, while the Estimated model has a value of 0.778. These two values indicate that both models have a relatively good match with the data, with the Saturated model slightly superior. Overall, while the Estimated model showed some improvement in some criteria, the Saturated model overall provided better results in terms of data conformity, as indicated by lower SRMR, d_ULS, d_G, and Chi-square values.

Table 6. Result of Hypothesis Testing (Direct Effect)

	Hypothesis	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Conclusion
H1 (+)	E-Commerce Platform Usage (x) → MSME's Growth (Y)	0.032	0.051	0.609	0.542	Not Supported
H2(+)	E-Commerce Platform Usage (x) → Entrepreneurial Marketing Strategy (Z)	0.528	0.051	10.334	0.000	Supported
H3(+)	Entrepreneurial Marketing Strategy (Z) > MSME's Growth (Y)	0.433	0.062	6.980	0.000	Supported

Source: Processed data 2025

Table 6 shows the results of the hypothesis test for the direct influence between the variables in the research model. This table presents the test results of three hypotheses that were statistically tested, with results that include the sample mean, standard deviation, T statistics, P values, and the conclusion of each hypothesis. The first hypothesis (H1) tests the influence of E-Commerce Platform Usage (x) on MSME's Growth (Y). The test results showed a sample mean of 0.032 with a standard deviation of 0.051 and T statistics of 0.609. The P-value is 0.542, which is greater than 0.05, so this hypothesis is not supported. This means that there is not enough evidence to support that the use of e-commerce platforms has a direct effect on the growth of MSMEs. The second hypothesis (H2) tests the influence of E-Commerce Platform Usage (x) on Entrepreneurial Marketing Strategy (Z). The mean sample value

is 0.528, with a Standard deviation of 0.051 and a T statistics of 10.334. A very small P-value (0.000) indicates that this hypothesis is supported. This means that there is significant evidence that the use of e-commerce platforms has a direct effect on entrepreneurial marketing strategies. The third hypothesis (H3) tests the influence of Entrepreneurial Marketing Strategy (Z) on MSME's Growth (Y). With a sample mean of 0.433, a standard deviation of 0.062, and a T statistic of 6.980, the test results showed a very small P value (0.000), which indicates that this hypothesis is supported. This means that entrepreneurial marketing strategies have a significant influence on the growth of MSMEs.

Table 7. Result of Hipotesis Testing (Indirect Effect)

	Hyphotesis	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Conclusion
	E-Commerce Platform Usage (x) ->					
H4(+)	Entrepreneurial Marketing Strategy (Z) -> MSME's Growth (Y)	0.229	0.040	5.639	0.000	Supported
H5(+)	Post-Pandemi Era (M) x E-Commerce Platform Usage (x) -> MSME's Growth (Y)	-0.048	0.040	1.244	0.214	Not Supported

Source: Processed data 2025

Table 7 presents the results of the hypothesis test for the indirect influence between variables in the research model. The results of this test include the Sample mean, Standard deviation, T statistics, P values, and Conclusion values for each hypothesis tested. The first hypothesis (H4) tests the influence of E-Commerce Platform Usage (x) on Entrepreneurial Marketing Strategy (Z) which then affects MSME's Growth (Y). The test results showed a sample mean of 0.229, a standard deviation of 0.040, and a T statistics of 5.639. A very small P-value (0.000) indicates that this hypothesis is supported. This means that there is a significant influence between the use of e-commerce platforms on entrepreneurial marketing strategies which then affects the growth of MSMEs. Meanwhile, the second hypothesis (H5) tests the influence of the Post-Pandemic Era (M) interacting with E-Commerce Platform Usage (x) on MSME's Growth (Y). The test results showed a sample mean of -0.048, a standard deviation of 0.040, and a T statistics of 1.244. The P-value is 0.214, which is greater than 0.05, so this hypothesis is not supported. This means that the interaction between the post-pandemic era and the use of e-commerce platforms does not show a significant influence on the growth of MSMEs.

5. Comparison

This research focuses on the influence of e-commerce platforms on the growth of MSMEs in the post-pandemic era, with an emphasis on the implementation of entrepreneurial marketing strategies in the digital ecosystem. Previously, several studies have discussed the impact of digital transformation on MSMEs (Whalen et al., 2015; Eggers et al., 2018), but this study highlights more the specific role of e-commerce platforms in accelerating post-pandemic recovery, an aspect that has not been widely researched in this context. For example, research by Sadiku-Dushi et al. (2019) and Miles et al. (2006) shows the importance of digitalization in the sustainability of MSMEs, but it does not sufficiently delve into the interaction between the post-pandemic era and the direct use of e-commerce platforms. This research makes a significant contribution by identifying that the use of e-commerce platforms facilitates more adaptive and innovative marketing strategies in post-pandemic conditions, which is highly relevant to changing consumer behavior and new market dynamics.

In terms of methodology, this study uses Structural Equation Modeling (SEM) to analyze the direct and indirect relationship between the use of e-commerce platforms, entrepreneurial marketing strategies, and the growth of MSMEs. This is in contrast to previous research approaches that tend to rely more on descriptive analysis or case studies without comprehensively considering the effects of mediating and moderation (Kraus et al., 2010; Whalen et al., 2015). Thus, this study offers a more holistic approach in measuring the impact of e-commerce use on the growth of MSMEs by considering other factors such as entrepreneurial marketing strategies. However, although this research introduces new perspectives, there are still some areas that can be further developed. For example, further

research could explore more deeply the challenges faced by MSMEs in adopting digital technologies outside of e-commerce platforms, or how other external factors (such as government policies or private sector support) affect the adoption and utilization of e-commerce by MSMEs.

6. Conclusions

The results of the study show that the use of e-commerce platforms has a significant influence on entrepreneurial marketing strategies and ultimately encourages the growth of MSMEs. Innovative and adaptive marketing strategies, integrated with e-commerce platforms, enable MSMEs to be more responsive to market changes and post-pandemic consumer behavior. These findings support the hypothesis that e-commerce platforms play an important role as an important enabler in the digitalization of MSMEs, facilitating the adoption of more efficient and effective marketing strategies. This research contributes to the literature on the digital transformation of MSMEs, by providing a new perspective on how e-commerce can drive business growth and sustainability, especially in the context of post-pandemic recovery. However, while this study provides valuable insights, there are some limitations, such as the focus on MSMEs in specific regions and data limitations that can affect the generalization of findings. For further research, it is recommended to explore external factors influencing the adoption of digital technology by MSMEs, such as government policies or support from the private sector, as well as conduct comparative studies between different industry sectors in utilizing e-commerce platforms.

Author Contributions: Sudarmiatin contributes to the development of research concepts and methodologies, providing key direction in designing the theoretical framework and approach used in this study. Meanwhile, Nanik Wahyuningtiyas is responsible for writing articles, validating data, and analyzing research results. Nanik also took a leading role in the writing of the entire manuscript, including the synthesis of the findings and the preparation of conclusions describing the contribution of this research.

Funding: This research did not receive external funding.

Acknowledgments: We would like to thank the State University of Malang for the administrative and technical support that has been provided during the implementation of this research. We would also like to thank all respondents who took the time to participate in this study. Lastly, we appreciate the contribution of the research team who have assisted in the collection and analysis of the data.

Conflicts of Interest: The authors state that there are no conflicts of interest associated with this study. The author has no personal or financial interests that could influence the design, collection, analysis, or interpretation of the data, nor in the writing of the manuscript or the decision to publish the results of this research.

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