

The Influence of Digital Marketing on the Understanding, Skills, Implementation and Performance of MSMEs Moderated by Constraints

Katri Gentari^{1*}, Sri Agustina², Ika Rakhmalina³, Heriyana Heriyana⁴, Avisa Calista⁵, Emelda Emelda⁶

Institut Rahmaniyyah Sekayu, Sumatera Selatan, Indonesia^{1,2,3,4,5,6}

gentarikatri2@gmail.com^{1*}, sri.agustina0@gmail.com², ika.rakhmalina1983@gmail.com³,
heriyana010179@gmail.com⁴, calistaavissa@gmail.com⁵, imelda280573@gmail.com⁶



Article History:

Received on 18 September 2025
 1st Revision on 23 October 2025
 2nd Revision on 30 October 2025
 3rd Revision on 6 November 2025
 Accepted on 7 November 2025

Abstract

Purpose: This study aims to analyze in depth the effect of digital marketing training on improving understanding, skills, and the performance of MSMEs, with constraints as a moderating variable. The background of this research is based on the condition of MSMEs in Musi Banyuasin Regency, which face significant challenges in digital adaptation, such as limited digital literacy, insufficient promotional capital, and uneven internet access across regions.

Methodology/Approach: This study employs a quantitative approach using a Likert-scale questionnaire distributed to 121 MSME participants of digital marketing training, along with secondary data obtained from the Office of Cooperatives and MSMEs of Musi Banyuasin Regency. Data analysis was conducted through reliability testing and regression analysis to examine both direct and moderating effects.

Results/Findings: The results indicate that digital marketing training does not have a significant effect on understanding (Y1) and skills (Y2), but has a significant effect on MSME performance (Y3). The constraint factor was found to act as a moderating variable that weakens the relationship between digital marketing training and the dependent variables.

Conclusions: Digital marketing training can enhance MSME performance even though it does not directly improve understanding and skills. These findings highlight the importance of tiered digital marketing training programs and continuous mentoring to ensure sustainable learning outcomes.

Limitations: This study is limited to a quantitative approach and the geographic area of Musi Banyuasin Regency, thus the findings cannot yet be generalized broadly.

Contribution: This research enriches the literature on the influence of digital marketing training on MSME performance and provides practical implications for local governments in strengthening digital capacity and competitiveness of MSMEs in the digital economy era.

Keywords: Constraints, Digital Marketing, Performance, Skills, Understanding

How to Cite: Gentari, K., Agustina, S., Rakhmalina, I., Heriyana, H., Calista, A., Emelda, E. (2026). The Influence of Digital Marketing on the Understanding, Skills, Implementation and Performance of MSMEs Moderated by Constraints. *Studi Akuntansi, Keuangan, dan Manajemen*, 5(3), 183-197.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a significant role in both the national and regional economy. MSMEs not only contribute to the Gross Domestic Product (GDP) but also provide a large number of jobs for the community (Yakin and Suhaeni 2020). According to data from the Ministry of Cooperatives and SMEs, in 2023, the number of MSMEs in Indonesia reached more than 64 million business units, contributing around 61% to the national GDP and absorbing more than 97% of the workforce. At the regional level, particularly in Musi Banyuasin (Muba), MSMEs are also the backbone of the local economy. With thousands of business units spread across various districts, MSMEs in Muba operate in sectors such as trade, food, handicrafts, services, and processed agriculture. However, despite their large potential, MSMEs still face various challenges, especially in marketing, limited access to capital, and the low utilization of digital technology.

The changing consumption patterns of society, which are becoming increasingly digital, demand MSMEs to transform (Robby et al. 2024). The era of Industry 4.0 and the acceleration of digitalization due to the COVID-19 pandemic have pushed consumers to shift to online platforms for transactions. This phenomenon presents significant opportunities for MSMEs to expand their markets but also poses challenges for businesses that still rely on conventional methods. Many MSMEs in rural areas, including in Musi Banyuasin, still rely on word-of-mouth sales, traditional markets, or simple promotional methods. As a result, the competitiveness of MSMEs is limited, and they struggle to reach a wider consumer base. This condition indicates that digital marketing skills have become an urgent need for MSMEs to remain relevant in the digital era.

Digital marketing is a marketing strategy that utilizes digital technology, the internet, and social media to reach consumers (Ana and Prianthara 2025). This strategy includes the use of platforms such as marketplaces, social media (Instagram, Facebook, TikTok), websites, and digital advertising services (Aini and Zagladi 2025; Mubarok and Hidayati 2024). According to Kotler (2022) digital marketing not only increases brand awareness but also strengthens relationships with consumers interactively. The effective implementation of digital marketing can help MSMEs expand their market, increase sales, and build customer loyalty (Tam and Lung 2025). However, utilizing this strategy requires knowledge, skills, and readiness of human resources.

Therefore, digital marketing training for MSMEs is an essential intervention that should be carried out by local governments, educational institutions, and non-governmental organizations. In Musi Banyuasin, the local government, through the Department of Cooperatives, MSMEs, and Industry, has organized digital marketing training programs. These programs are intended to equip MSME actors with skills in using social media, marketplaces, and digital promotion techniques. However, although these training activities have been carried out, there has been little academic research assessing the impact of digital marketing training on MSME performance. Impact evaluation is important to determine whether the training has contributed to increased revenue, market reach, or competitiveness of MSMEs. Without evaluation, training programs may become ceremonial activities that do not yield significant results for the development of MSMEs.

Several previous studies have shown that digital marketing can improve MSME performance. For example, the research by Rosita, Antoni, and Samsuddin (2024) found that digital marketing significantly impacts the performance of MSMEs in Women Entrepreneurs of Sirah Pulau Village, Merapi Timur District, Lahat, and suggested that digital marketing usage should be increased to improve MSME performance. Another study by Effendi, Bakar, and Bachri (2023) found that digital marketing positively and significantly impacts product innovation in MSMEs in Lhokseumawe, and positively influences the marketing performance of MSMEs. Meanwhile, a study by Ayu Wandira et al. (2024) found that digital marketing positively and significantly impacts sales performance in MSMEs of Durenstory Serang. This means that the better the application of digital marketing, the higher the sales performance of Durenstory products.

The situation in Musi Banyuasin has its own distinct characteristics. Most MSMEs are located in semi-urban and rural areas, where internet access, digital infrastructure, and technological literacy are still

limited. These factors certainly influence how effectively digital marketing training can be implemented. Therefore, research that specifically evaluates the impact of digital marketing training on MSME performance in Musi Banyuasin is crucial, not only to observe short-term results in terms of skill improvement but also the long-term implications on business development.

According to data from the Department of Cooperatives and MSMEs, Musi Banyuasin has 12,134 MSME actors, with data ranging from 2018 to 2025. The majority of businesses are in the micro sector and are spread across 15 districts in the regency, including various types of businesses such as food industries, retail traders, tailors, fish farming, haircuts and salons, grocery stores, cosmetics, vegetable traders, food stalls, bicycle repair shops, oil sellers, chicken sales, mobile phone credit sales, and more, as detailed in the attached annex.

The urgency of this research lies in the need to analyze whether the digital marketing training conducted has had an impact on MSME actors' understanding and skills, whether it has influenced the application of digital marketing, and whether the training has had an effect on MSME performance with constraints as the moderating variable. The results of this study are expected to provide evidence-based recommendations to the local government and other stakeholders. With the results of this measurement, the government can understand which aspects have been successful and which aspects need improvement, such as training materials, teaching methods, duration, or mentoring strategies.

Additionally, the findings of this study are also expected to provide practical benefits for MSME actors in Musi Banyuasin, such as understanding the importance of applying digital marketing and the tangible impact on business performance. Therefore, this research titled "Analysis of the Impact of Digital Marketing on the Understanding, Skills, Application, and Performance of MSMEs in Musi Banyuasin with Constraints as a Moderating Variable" is deemed relevant and significant. This research is expected to not only enrich the academic literature on digital marketing training and MSME performance but also provide a real contribution to policy development, empowerment strategies, and the enhancement of MSME competitiveness at the regional level.

The development of information technology has transformed the business landscape globally, including in the micro, small, and medium enterprise (MSME) sector (Suamiansi et al. 2025). In facing the challenges of the digital era, MSME actors are required not only to produce goods or services but also to have effective marketing strategies based on digital platforms (Pradana, Wijaya, and Utama 2025). Digital marketing has become one of the most relevant approaches, allowing MSMEs to reach a wider market at relatively low costs (Robby et al. 2024).

Various digital marketing training initiatives have been organized by local governments, ministries, and private organizations to enhance MSMEs' capacity. However, the implementation of training has not fully guaranteed significant changes in MSME actors' business behaviors. Often, the training is short-term without impact evaluations or follow-up mentoring, so the benefits are not comprehensively measured. Therefore, in facing market changes, it is not only the traditional market that must be adapted but also the digital world today. It is essential to understand whether the digital marketing training provided truly impacts MSME business performance. This evaluation can also serve as a basis for decision-making by stakeholders in designing more effective and sustainable training programs, both for business actors and the businesses they

The novelty of this research lies in testing the model of relationships between digital marketing training, understanding, skills, application, and MSME performance with constraints as a moderating variable, which has not been extensively empirically studied in semi-urban areas like Musi Banyuasin. Most previous studies have focused on the direct impact of digital marketing on MSME performance or sales, without examining the process of performance formation through improved understanding and skills resulting from training. This research expands this perspective by including constraints as a moderator to explain why the same training may produce different impacts in the field.

This approach provides new insights that the effectiveness of digital marketing training is not only determined by the training materials and methods but also by the ability to adapt, digital infrastructure, and the psychological readiness of business actors to shift from traditional to digital marketing patterns. Moreover, this study contributes contextually by examining MSMEs in regions still facing limited access to technology, thus providing a more comprehensive picture of digital transformation dynamics at the regional level. As such, the results of this research are expected to enrich academic literature, provide empirical foundations for formulating more adaptive training policies, and serve as a practical reference for local governments in strengthening the MSME digital ecosystem sustainably.

2. Literature Review and Hypothesis Development

2.1. MSMEs (Micro, Small, and Medium Enterprises)

MSMEs are an important sector in the Indonesian economy due to their contributions to GDP and employment. According to Law Number 20 of 2008, MSMEs are defined based on asset size and annual turnover. MSMEs often face challenges such as limited capital, access to technology, and marketing. In the context of digitalization, MSMEs must adapt technology-based business strategies to survive and grow. The number of MSMEs has grown significantly since the COVID-19 pandemic. MSMEs in Indonesia have proven to be resilient to various economic shocks and crises. Their presence is beneficial in distributing income among the population and is a key pillar of the Indonesian economy (Putra 2018).

For most Indonesians, MSMEs are the backbone of the people's economic system, making MSME development a priority in national economic development. Development aims not only to reduce income inequality between groups, poverty, and unemployment but also to expand the economic base and contribute to structural changes, particularly in boosting regional economies and strengthening national economic resilience (Yakin and Suhaeni 2020).

The World Bank defines MSMEs into three classifications based on employee conditions, income, and asset values. From the above definition, it can be explained that small businesses generally have certain characteristics, including (Suyadi, Syahdanur, and Suryani 2018).

1. The business is individually owned and not yet legally incorporated as a company.
2. Legal business aspects are still unaddressed.
3. There are few employees, and no clear division of labor exists.
4. Most businesses do not keep records or separate personal assets from business assets.
5. Initial capital comes from the owner's funds.
6. Limited number of employees.
7. The business owner feels responsible for running the business.

2.2. Digital Marketing, Understanding, Skills, and Performance

Digital marketing is the process of promoting products or services using digital platforms such as social media, search engines, email, and websites. According to Kotler and Keller (2018), digital marketing enables companies to reach a broader market efficiently. For MSMEs, this strategy is important because it offers low costs and wide reach.

Common digital marketing activities include the use of television, mobile phones, videotrons, radio, websites, social media (Instagram, WhatsApp Business, Facebook, TikTok), marketplaces (Shopee, Tokopedia), and email, Messenger Apps, and digital ads (Fadhli and Pratiwi 2021). The definition of digital marketing according to several experts is: France, France, Davcik, and Kazandjian (2025) define digital marketing as marketing activities, including branding, using various media such as blogs, websites, email, AdWords, and various social media networks.

Digital marketing is a process of planning and implementing concepts, ideas, prices, promotions, and distribution. Simply put, it can be defined as building and maintaining mutually beneficial relationships between consumers and producers (France, Davcik, and Kazandjian 2025b). Digital marketing uses the development of the digital world for advertising that is not explicitly promoted but has a significant influence (Dwivedi et al. 2021). We can conclude that digital marketing is a technique for marketing or promoting services, brands, or products using digital media or the internet.

Understanding and skills are important aspects in measuring the success of digital marketing training for MSME actors. According to Suyadi, Syahdanur, and Suryani (2018) in the *Taxonomy of Educational Objectives*, understanding is in the cognitive domain, indicating how well an individual can understand, interpret, and explain information obtained from training. The higher the level of understanding, the easier it is for individuals to apply new concepts in practice.

Moreover, skills fall under the psychomotor domain, referring to the ability to apply knowledge in real actions. Competency Theory emphasize that skills are a key component of competence that determines job success. In the context of digital marketing, skills encompass the ability to use social media, marketplaces, websites, and various digital platforms for promotion and business management. Furthermore, the Technology Acceptance Model supports that technological understanding affects the level of technology acceptance and usage. If MSME actors have a good understanding of the benefits and workings of digital marketing, they will be more confident and skilled in implementing it. Therefore, this theory emphasizes the close relationship between increased understanding, skills, and the effectiveness of implementing digital marketing.

H1: The Effect of Digital Marketing on Understanding and Skills

2.3. Digital Training for MSMEs and Application and Performance of MSMEs

Digital marketing training is an intervention to increase the digital literacy and capability of MSME actors. The goal of training is to help MSMEs utilize technology independently to promote and sell their products (Novitasari 2022). Effective training must meet the participants' needs, employ active methods, and include post-program evaluation.

The terms training and development have been defined in various ways by experts Astuti, Kartono, and Rahmadi (2020) state that training is a learning process provided to improve performance related to current jobs. According to Indrawan Lubis and Salsabila (2024) training refers to efforts planned by a company to facilitate employees' learning of job-related competencies, so it can be concluded that training is a short-term learning process using systematic and organized procedures where employees learn knowledge and skills to improve their capabilities to achieve operational goals (Sailendra, Suratno, and Tampubolon 2020).

Meanwhile, development refers to efforts to improve employees' technical, theoretical, conceptual, and moral abilities in accordance with job needs through education and training. Development can also be interpreted as preparing individuals to take on different or higher responsibilities in a company, organization, or educational institution. MSME performance essentially reflects the achievement of business objectives. According to (Cooper and Kaplan 2019) in the *Balanced Scorecard* concept, performance is measured not only from financial aspects (such as increasing revenue and profit) but also from non-financial aspects such as customer satisfaction, innovation, and human resource development.

In the perspective of strategic management, the Resource-Based View (Noor 2012) explains that a company's performance is greatly influenced by unique and hard-to-imitate resources, including knowledge and digital skills. In other words, mastering digital marketing can become a strategic resource for MSMEs to increase their competitiveness. Meanwhile, (Aisyah and Nurjanah 2024) emphasize that MSME performance in Indonesia is often measured by indicators such as sales revenue growth, number of customers, market reach, and increased brand awareness. This indicates that MSME performance is closely related to their ability to utilize digital technology to expand markets and maintain business sustainability.

H2: The Effect of Digital Marketing on Understanding, Skills, Application, and MSME Performance

2.4. Digital Marketing, Understanding, Skills, Application, Performance, and Constraints

Digital marketing is one strategy that can increase the capacity and competitiveness of MSMEs through the use of digital technology in promotion, sales, and communication with customers (Kotler & Keller, 2016). The implementation of digital marketing training is believed to enhance MSME actors' understanding of modern marketing concepts, skills in using digital platforms, and their ability to apply

technology-based marketing strategies, ultimately having a positive impact on MSME performance (Henderson et al., 2020; Suci & Rahman, 2021).

Training evaluation is a systematic process to assess the effectiveness of a program in achieving its objectives. A commonly used evaluation model is Donald Kirkpatrick's 1959 evaluation model, known as "the five levels technique for evaluating training programs," which consists of five levels: Reaction, Learning, Behavior, Results, and Return on Training Investment. This evaluation is conducted to assess the return on investment in training. Wirawan (2012) defines program evaluation as the systematic collection of descriptive information and assessments needed to make effective training decisions related to selection, adoption, value, and modification of learning activities. (Kurtz and Boone 1992) describe training evaluation as a series of activities in identifying the effectiveness of training objectives compared to the implementation required to draw decisions about the sustainability of competency-enhancement training and learning methods and curriculum (Hatmanto and Rahmawati 2022).

In this study, the constraints variable acts as a moderating variable that influences the relationship between digital marketing training and understanding, skills, application, and MSME performance. The role of moderation can be explained through several theoretical foundations. First, Contingency Theory emphasizes the effectiveness of a strategy or intervention is greatly influenced by situational factors faced by an organization. Thus, even if digital marketing training is provided, the results for MSMEs will depend on the level of constraints faced, such as limited capital, internet infrastructure, and technical assistance. Second, Constraint Theory emphasizes that every system has constraints that limit the achievement of optimal goals. In the context of MSMEs, constraints in the form of limited resources can weaken the relationship between training and the application of digital marketing. Good training does not necessarily result in effective application if key obstacles are not addressed.

Third, Resource Dependency Theory highlights that organizations are highly dependent on the availability and access to external resources. If MSMEs' access to essential resources (e.g., digital technology, capital, or internet connectivity) is limited, the impact of training on performance will be weaker. Moderation as a variable that affects the direction or strength of the relationship between independent and dependent variables. In this study, constraints may weaken or even nullify the effect of digital marketing training on increasing understanding, skills, application, and MSME performance.

However, the effectiveness of digital marketing training is not always uniform in every context. Constraints such as limited digital literacy, inadequate internet infrastructure, and insufficient capital support can affect how well the knowledge and skills gained from training can be optimally applied (Rahmawati, 2022). From the perspective of the Innovation Diffusion Theory Rogers, (2003), the success of technology adoption is determined by both internal factors (individual abilities and readiness) and external factors (environmental support and resources). This means that while digital marketing training has great potential to improve MSME performance, internal and external constraints can weaken this relationship.

Previous research has also shown varied results. A study by Astuti and Nugroho (2021) found that digital marketing training significantly improved MSMEs' online marketing capabilities, while research by Lestari (2022) showed that limitations in facilities and human resources were the main barriers to the effectiveness of the training. Thus, constraints can act as a moderating variable determining the strength of the effect of digital marketing on increasing understanding, skills, application, and MSME performance.

H3: The Effect of Digital Marketing on Understanding, Skills, Application, and MSME Performance Moderated by Constraints

3. Methodology

This research is classified as Quantitative Research with an Explanatory Research design. Explanatory research is used to explain the causal relationship between the independent variable, namely Digital Marketing Training, and the dependent variables which include Understanding, Skills, and MSME Performance, with Constraints as a Moderating Variable. The approach used is a quantitative approach

with a survey method. The research data were obtained through the distribution of questionnaires to respondents who are MSME actors who participated in the digital marketing training.

The collected quantitative data were then analyzed using inferential statistical analysis techniques to test the hypotheses that have been established. This research design is descriptive-associative, which means it not only describes the condition of the research variables but also analyzes the relationships and influences between variables, both directly and by considering the moderating effects. The research was conducted in Musi Banyuasin Regency, South Sumatra Province, with the research object being MSME actors who have participated in digital marketing training programs organized by the local government and relevant agencies. The research was conducted from August to September 2025.

The population in this study is all MSME actors in Musi Banyuasin who have participated in digital marketing training during the 2022-2024 period. Based on data from the Department of Cooperatives and MSMEs of Musi Banyuasin, the number of training participants during this period was recorded as ± 250 MSMEs. The sample for this study was determined using purposive sampling, meaning only MSME actors who have truly participated in digital marketing training and are willing to be respondents were included. The sample size for this study was 121 respondents, considered representative to reflect the research phenomenon.

The data collection technique for this research was through questionnaires, with the main instrument being a questionnaire with a 1-5 Likert scale. The questionnaire was distributed to 121 MSME actors who participated in digital marketing training in Musi Banyuasin. The questions were designed based on the research variables: X (Digital Marketing Training), Y1 (Understanding), Y2 (Skills), Y3 (MSME Performance), Y4 Moderation (Constraints). Documentation: Secondary data were obtained from reports of the Department of Cooperatives and MSMEs of Musi Banyuasin, records of training participants, and MSME profiles. This documentation was useful to strengthen the background information of the research. Supporting Interviews (Optional): A few respondents were selected for brief interviews to clarify answers from the questionnaire.

Validity and reliability tests were conducted to ensure the questionnaire instrument's validity and consistency. The validity test results for each research instrument showed that the variables (Digital Marketing Training), Y1 (Understanding), Y2 (Skills), Y3 (MSME Performance), Y4 Moderation (Constraints) in the questionnaire had correlation coefficients greater than 0.159, meaning all questions in the questionnaire are valid and can be used as data collection tools. The reliability test results for each variable showed that the Cronbach's alpha reliability coefficient for the variables of social support (X), hardiness (Z), and stress (Y) in the questionnaire was greater than 0.6, meaning the question items for each variable were reliable and can be used as data collection tools.

Data analysis in this study was performed using linear regression analysis to test the relationships between the variables X (Digital Marketing Training), Y1 (Understanding), Y2 (Skills), Y3 (MSME Performance), Y4 Moderation (Constraints). This technique was chosen because it can explain both direct and indirect influences between variables, as well as identify the contribution of each variable in affecting MSME performance.

4. Results and Discussion

4.1. Respondent Characteristics

4.1.1. Respondent Characteristics by Age

The following SPSS output presents the frequency (number of respondents) and percentage of each respondent characteristic.

Table 1. Processed Data of Respondents' Age

Age				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	2	1.7	1.7
	21	1	.8	.8
	23	2	1.7	1.7
	25	1	.8	.8
	26	1	.8	.8
	27	3	2.5	2.5
	28	2	1.7	1.7
	29	6	5.0	5.0
	30	4	3.3	3.3
	31	5	4.1	4.1
	32	6	5.0	5.0
	33	4	3.3	3.3
	34	8	6.6	6.6
	36	4	3.3	3.3
	37	9	7.4	7.4
	38	3	2.5	2.5
	39	7	5.8	5.8
	40	2	1.7	1.7
	41	4	3.3	3.3
	42	6	5.0	5.0
	43	6	5.0	5.0
	44	7	5.8	5.8
	45	9	7.4	7.4
	46	6	5.0	5.0
	47	2	1.7	1.7
	48	1	.8	.8
	49	1	.8	.8
	50	1	.8	.8
	51	5	4.1	4.1
	53	1	.8	.8
	54	2	1.7	1.7
Total		121	100.0	100.0

From the table above, it is explained that the total number of respondents is 121, with the youngest business actor being 20 years old and the oldest being 54 years old from the respondents who filled out the distributed questionnaire.

4.1.2. Respondent Characteristics by Business Type

Table 2. Processed Data of Respondents' Business Types

Business Types				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Motorcycle Repair Shop	8	6.6	6.6
	Lobster Farming	1	.8	.8
	Spices	1	.8	.8
	Photocopy	2	1.7	1.7
	Services	3	2.5	2.5
	Handicrafts	5	4.1	4.1
	Oka23 Powdered Coffee	1	.8	.8
	Food/Drinks	90	74.4	74.4
				91.7

Printing	3	2.5	2.5	94.2
Souvenir Center	1	.8	.8	95.0
Beauty Salon	6	5.0	5.0	100.0
Total	121	100.0	100.0	

Of the total 121 respondents who filled out the questionnaire, they are divided into 11 types of businesses spread across Musi Banyuasin Regency. The most common business type was food and beverage, with 90 respondents, while the least common were the souvenir center and powdered coffee businesses, each with 1 respondent.

4.1.3. Respondent Characteristics by Business Duration

Table 3. Processed Data of Respondents' Business Duration

Business Duration					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 Years	9	7.4	7.4	7.4
	> 6 Years	20	16.5	16.5	24.0
	1–3 Years	68	56.2	56.2	80.2
	4–6 Years	13	10.7	10.7	90.9
	4–6 Years	11	9.1	9.1	100.0
	Total	121	100.0	100.0	

The duration of businesses that have been established by MSME actors is categorized into 5 time periods, and from the table, the most common business duration is between 1-3 years, with a total of 68 respondents, while the least common is less than 1 year, with 9 respondents.

4.1.4. Respondent Characteristics by Number of Employees

Table 4. Processed Data of Respondents' Number of Employees

Number of Employees					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No answer	2	1.7	1.7	1.7
	> 10	2	1.7	1.7	3.3
	1–3	99	81.8	81.8	85.1
	4–10	18	14.9	14.9	100.0
	Total	121	100.0	100.0	

The table above shows that the most common response for the number of employees was 1-3 employees, with 99 respondents. Then, 2 respondents did not answer, and 2 respondents had more than 10 employees.

4.1.5. Respondent Characteristics by Gender

Table 5. Processed Data of Respondents' Gender Characteristics

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	L	48	39.7	39.7	39.7
	P	73	60.3	60.3	100.0
	Total	121	100.0	100.0	

From the respondents, a total of 73 were female and 48 were male, making the total number of respondents 121 overall.

4.1.6. Respondent Characteristics by Last Education

Table 6. Processed Data of Respondents' Last Education

Last Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2.5	2.5	2.5
	2	17	14.0	14.0	16.5
	3	78	64.5	64.5	81.0
	4	20	16.5	16.5	97.5
	5	3	2.5	2.5	100.0
	Total	121	100.0	100.0	

From the last education data, it is detailed as follows: 3 respondents completed elementary school (SD), 17 respondents completed junior high school (SMP), 78 respondents completed high school (SMA or equivalent), 20 respondents have a bachelor's degree (Strata 1), and 3 respondents have a master's degree (S2).

4.2. Data Analysis

4.2.1. Regression of Variable X on Y1 with Y4 as Moderation

Table 7. Processed Data of Regression

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.562	1.514		8.958	.000
	Digital Marketing Training	-.015	.126	-.014	-.116	.908
	X*Y4	.008	.006	.172	1.417	.159

a. Dependent Variable: Understanding and Skills

Based on the regression test results in the table above, it can be seen that the significance value or p-value of X on Y1 is $0.908 > 0.05$, so it can be concluded that there is no effect of X on Y1. The presence of variable Y4 as a constraint also makes X have no effect on Y1, where the significance value is $0.159 > 0.05$.

4.2.2. Regression of Variable X on Y2 with Y4 as Moderation

Table 8. Processed Data of Regression X on Y2

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.158	1.387		9.483	.000
	Digital Marketing Training	-.058	.116	-.061	-.501	.617
	X*Y4	.008	.005	.176	1.445	.151

a. Dependent Variable: Understanding and Skills

Based on the regression test results in the table above, it can be seen that the significance value or p-value of X on Y2 is $0.617 > 0.05$, so it can be concluded that there is no effect of X on Y2. The presence of variable Y4 as a constraint also makes X have no effect on Y2, where the significance value is $0.151 > 0.05$.

4.2.3. Regression of Variable X on Y3 with Y4 as Moderation

Table 9. Processed Data of Regression X on Y3 with Y4 Moderation

Model		Coefficients ^a			t	Sig.
		B	Unstandardized Coefficients	Standardized Coefficients		
1	(Constant)	16.328	1.394		11.713	.000
	Digital Marketing Training	-.383	.116	-.373	-3.298	.001
	X*Y4	.026	.005	.535	4.729	.000

a. Dependent Variable: MSME Performance

Based on the regression test results in the table above, it can be seen that the significance value or p-value of X on Y3 is $0.001 < 0.05$, so it can be concluded that there is an effect of X on Y3. The presence of variable Y4 as a constraint does not make X have no effect on Y1, where the significance value is $0.000 < 0.05$. Therefore, despite the constraints, X still has an effect.

4.2.4 The Relationship Between Understanding/Skills and Application Regression of Variable Y1 on Y2 with Y4 as Moderation

Table 10. Processed Data of Regression Variable Y1 on Y2 with Y4 Moderation

Model		Coefficients ^a			t	Sig.
		B	Unstandardized Coefficients	Standardized Coefficients		
1	(Constant)	8.093	1.161		6.971	.000
	Digital Marketing Training	.325	.108	.356	3.006	.003
	Y1*Y4	.004	.005	.101	.856	.394

a. Dependent Variable: Understanding and Skills

Based on the regression test results in the table above, it can be seen that the significance value or p-value of Y1 on Y2 is $0.003 < 0.05$, so it can be concluded that there is an effect of Y1 on Y2. The presence of variable Y4 as a constraint makes Y1 have no effect on Y2, where the significance value is $0.394 > 0.05$.

4.2.5 The Relationship Between Digital Marketing Application (Y2) and MSME Performance (Y3) Regression of Variable Y2 on Y3 with Y4 as Moderation

Table 11. Processed Data of Regression Variable Y2 on Y3 with Y4 Moderation

Model		Coefficients ^a			t	Sig.
		B	Unstandardized Coefficients	Standardized Coefficients		
1	(Constant)	11.908	1.234		9.653	.000
	Digital Marketing Training	.029	.006	.546	4.695	.000
	Y2*Y4	-.116	.126	-.107	-.920	.360

a. Dependent Variable: MSME Performance

Based on the regression test results in the table above, it can be seen that the significance value or p-value of Y2 on Y3 is $0.000 < 0.05$, so it can be concluded that there is an effect of Y2 on Y3. The presence of variable Y4 as a constraint also makes Y2 have no effect on Y3, where the significance value is $0.360 > 0.05$.

4.3. Discussion

The research findings indicate that digital marketing training does not have a significant impact on participants' understanding. However, both constructivist learning theory and the concept of knowledge transfer state that training should enhance an individual's understanding. This discrepancy may be caused by constraints such as limited time, internet access, or post-training mentoring. In other words, although the training material has been provided, participants' understanding has not developed optimally due to structural and technical barriers. This finding is supported by Kotler (2022) theory that digital marketing not only increases brand awareness but also strengthens relationships with consumers interactively. The effective implementation of digital marketing can help MSMEs expand their market, increase sales, and build customer loyalty (Tam and Lung 2025).

The research also shows the effect of digital marketing training on skills (Y2). The findings indicate that digital marketing training does not have a significant impact on participants' skills. Theoretically, according to Human Capital Theory, skill improvement is one of the primary outcomes of training. However, in practice, MSME actors require more than just material; they need technical mentoring, repeated practice, and facility support. Constraints such as limited capital to try digital strategies or lack of technical expertise prevent the expected skills from being developed significantly.

The role of constraints as a moderating variable in the effect of digital marketing on understanding, skills, application, and MSME performance was proven. The high level of constraints makes it difficult for the training to improve understanding and skills, but some MSME actors still experience direct benefits on their business performance. This finding indicates that the effect of digital marketing training is not always linear from understanding → skills → performance. In the case of MSMEs, training can directly contribute to performance even if the improvement in understanding and skills is hindered.

This finding is supported by Rosita, Antoni, and Samsuddin (2024) whose research found that digital marketing significantly impacts the performance of MSMEs in Women's Entrepreneurship in Sirah Pulau Village, Merapi Timur District, Lahat, suggesting that digital marketing usage should be increased to improve MSME performance. Another study by Effendi, Bakar, and Bachri (2023) found that digital marketing positively and significantly affects product innovation in MSMEs in Lhokseumawe, and positively influences MSME marketing performance. Meanwhile, a study by Ayu Wandira et al. (2024) found that digital marketing positively and significantly affects sales performance in MSMEs of Durenstory Serang. This means that the better the implementation of digital marketing, the higher the sales performance of Durenstory products.

Based on the results, it can be concluded that digital marketing training does not always impact according to the existing theoretical framework. Theoretically, improving understanding and skills is a prerequisite for improving MSME performance. However, in practice, the constraints make this pathway obstructed, and the benefits of the training are more immediately visible in terms of performance. This finding emphasizes that the context of MSMEs has unique characteristics: limited resources not only hinder the learning process but also change the relationship between variables.

The implication is that digital marketing training organizers need to adjust their strategies, for example, by providing ongoing technical mentoring, offering practical facilities, and helping MSMEs overcome key constraints such as costs, internet access, and time limitations. In this way, training can not only have a direct impact on performance but also strengthen understanding and skills as a long-term foundation.

The research findings, which show that digital marketing training does not significantly affect understanding and skills but does impact MSME performance, are highly relevant to the local conditions in Musi Banyuasin Regency. Most MSMEs in Muba operate in traditional trade, agriculture, and culinary sectors, with relatively low digital literacy levels. This condition makes it difficult for participants to fully understand the training material, and it does not directly translate into practical skills. Additionally, the constraints found in the study, such as limited capital, time, and internet access,

are indeed real issues in Muba. Digital infrastructure in rural areas is still uneven, so MSME actors often struggle to access digital marketing platforms optimally. This explains why training does not necessarily improve understanding and skills, despite the reliability of the training instruments.

However, the finding that training significantly impacts MSME performance shows that, despite these limitations, MSME actors in Muba are still able to utilize simple digital strategies, such as promotions through WhatsApp, Facebook Marketplace, or Instagram, to increase sales. This practice aligns with the digital adoption pattern in semi-urban areas, where technology use is more pragmatic and directly aimed at improving business outcomes. Thus, this study illustrates that in Musi Banyuasin, digital marketing training can indeed serve as a catalyst for improving MSME performance, but for the long term, there needs to be additional interventions in the form of ongoing technical mentoring, improvements in internet infrastructure access, and more targeted digital literacy programs tailored to local needs.

5. Conclusions

5.1. Conclusion

Based on the research results and discussion, it can be concluded that digital marketing training does not significantly impact understanding (Y1). This shows that the training provided has not been able to enhance participants' understanding of digital marketing concepts in depth. Digital marketing training does not significantly affect skills (Y2). Participants have not been able to internalize the training material into practical skills in operating digital marketing tools and platforms. Digital marketing training has a significant effect on MSME performance (Y3). This means that even though understanding and skills have not improved, MSME actors can still use simple digital strategies that directly impact business performance. Constraints play a role as a moderating factor that weakens the effect of training on understanding and skills, but does not entirely negate the impact on performance. Constraints such as limited capital, internet access, and lack of post-training mentoring are the main barriers.

5.2. Implications

The implications of this research enrich the literature on the effectiveness of digital marketing training in empowering MSMEs in areas with low digital literacy. The finding that training has a significant impact on understanding and skills, but a significant impact on performance, suggests an indirect mechanism in the digital learning process. This indicates that performance improvement is not always produced by deep theoretical understanding but also by pragmatic adaptation to simple digital marketing strategies. This finding expands organizational learning theory and the Technology Acceptance Model in the context of small business actors in semi-urban areas.

References

Aini, Nurul Qurrotul, and Arief Novirakhman Zagladi. 2025. "TikTok Sebagai Media Pemasaran: Influencer Marketing Dan E-WOM Mempengaruhi Keputusan Pembelian Skincare." *Studi Akuntansi, Keuangan, dan Manajemen (SAKMAN)* 4(2): 265–74. [10.35912/sakman.v4i2.3799](https://doi.org/10.35912/sakman.v4i2.3799)

Aisyah, Aisyah, and Yayuk Nurjanah. 2024. "Pendampingan Perhitungan Harga Pokok Produksi Terhadap Harga Jual Pada UMKM Kaos Baba Sablon." *Jurnal Abdimas Dedi Kesiukuan* 5(1): 91–106. doi:[10.37641/jadkes.v5i1.2448](https://doi.org/10.37641/jadkes.v5i1.2448)

Ana, I Wayan Pasek Prasi, and Ida Bagus Teddy Prianthara. 2025. "Peran Kepercayaan Dalam Moderasi Strategi Pemasaran Digital Pada E-Commerce Bali." *Studi Akuntansi, Keuangan, dan Manajemen (SAKMAN)* 5(2553–570). <https://doi.org/10.35912/sakman.v5i2.5392>

Astuti, R., & Nugroho, A. (2021). Pengaruh pelatihan digital marketing terhadap kemampuan pemasaran online pelaku UMKM di era digital. *Jurnal Ekonomi dan Bisnis Terapan*, 8(2), 115–124. <https://doi.org/10.47268/ebt.v8i2.876>

Astuti, Ramlah Puji, Kartono Kartono, and Rahmadi Rahmadi. 2020. "Pengembangan UMKM Melalui Digitalisasi Teknologi Dan Integrasi Akses Permodalan." *ETHOS: Jurnal Penelitian dan Pengabdian kepada Masyarakat* 8(2): 248–56. doi:[10.29313/ethos.v8i2.5764](https://doi.org/10.29313/ethos.v8i2.5764)

Ayu Wandira, Fadilatun Nufus, Nur Kholisah, Riki Gana Suyatna, and Silviah Silviah. 2024. "Pengaruh

Digital Marketing Terhadap Kinerja Penjualan Produk UMKM Durenstory Serang.” *Journal of Management and Social Sciences* 3(1): 235–44. doi:[10.55606/jimas.v3i1.1010](https://doi.org/10.55606/jimas.v3i1.1010)

Cooper, R., and R.S.. Kaplan. 2019. *The Design of Cost Management System: Text, Cases, and Readings*. Englewood Cliff, NJ: Pentice Hall.

Dwivedi, Yogesh K., Elvira Ismagilova, D. Laurie Hughes, Jamie Carlson, Raffaele Filieri, Jenna Jacobson, Varsha Jain, et al. 2021. “Setting the Future of Digital and Social Media Marketing Research: Perspectives and Research Propositions.” *International Journal of Information Management* 59(May 2020): 102168. doi:[10.1016/j.ijinfomgt.2020.102168](https://doi.org/10.1016/j.ijinfomgt.2020.102168)

Effendi, Muhammad Razie, Rusydi Abu Bakar, and Naufal Bachri. 2023. “Pengaruh Pemasaran Digital Terhadap Kinerja Umkm Di Kota Lhokseumawe Dengan Inovasi Produk Sebagai Variabel Intervening.” *J-MIND (Jurnal Manajemen Indonesia)* 7(2): 107–15. doi:[10.29103/j-mind.v7i2.6576](https://doi.org/10.29103/j-mind.v7i2.6576)

Fadhl, Khotim, and Nia Dwi Pratiwi. 2021. “Pengaruh Digital Marketing, Kualitas Produk, Dan Emosional Terhadap Kepuasan Konsumen Poskopi ZIO Jombang.” *Jurnal Inovasi Penelitian* 2(2): 603–12. <https://stpmataram.e-journal.id/JIP/article/view/684>.

France, Stephen L., Nebojsa S. Davcik, and Brett J. Kazandjian. 2025a. “Digital Brand Equity: The Concept, Antecedents, Measurement, and Future Development.” *Journal of Business Research* 192(February). doi:[10.1016/j.jbusres.2025.115273](https://doi.org/10.1016/j.jbusres.2025.115273)

France, Stephen L., Nebojsa S. Davcik, and Brett J. Kazandjian. 2025b. “Digital Brand Equity: The Concept, Antecedents, Measurement, and Future Development.” *Journal of Business Research* 192(February): 115273. doi:[10.1016/j.jbusres.2025.115273](https://doi.org/10.1016/j.jbusres.2025.115273)

Hatmanto, E. D., and F. Rahmawati. 2022. “Pemberdayaan SDM Desa Bangunjiwo Melalui Pelatihan Intensif Keterampilan Bahasa Inggris Sebagai Upaya Inisiasi Pendirian Kampung Inggris Muhammadiyah Bangunjiwo.” In Prosiding Seminar Nasional Program Pengabdian Masyarakat.

Henderson, M., Khatri, N., & Rahman, S. (2020). Digital marketing capability and SME performance: The mediating role of innovation. *International Journal of Entrepreneurship and Small Business*, 39(3), 349–368.

Indrawan Lubis, Putri Salsabila, and Rofila Salsabila. 2024. “Peran UMKM (Usaha Mikro, Kecil, Dan Menengah) Dalam Meningkatkan Pembangunan Ekonomi Di Indonesia.” *MUQADDIMAH: Jurnal Ekonomi, Manajemen, Akuntansi dan Bisnis* 2(2): 91–110. doi:[10.59246/muqaddimah.v2i2.716](https://doi.org/10.59246/muqaddimah.v2i2.716)

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education Limited.

Kotler, Keller. 2022. *Marketing Management*. London: Person Education.

Kotler, P., and Kevin Lane Keller. 2018. *Prinsip-Prinsip Marketing*. Pasuruan: CV. Penerbit Qiara.

Kurtz, David L, and Louis E Boone. 1992. *Principles of Management*. USA: McGraw-Hill Inc.

Lestari, D. (2022). Kendala penerapan digital marketing dalam peningkatan kinerja UMKM di masa pandemi COVID-19. *Jurnal Manajemen dan Kewirausahaan*, 24(1), 44–56. <https://doi.org/10.9744/jmk.24.1.44-56>

Mubarok, Alfina Rahma Nazilal, and Rusdi Hidayati. 2024. “Analisis Strategi Pemasaran Untuk Meningkatkan Enquiry Penjualan Ekspor Petikemas Di PT. Samudera Indonesia.” *Studi Akuntansi, Keuangan, dan Manajemen (SAKMAN)* 3(2): 95–105. <https://doi.org/10.35912/sakman.v3i2.2761>

Noor, Abd Halim Mohd. 2012. “Assessing Performance of Nonprofit Organization: A Framework for Zakat Institutions.” *British Journal of Economics, Finance and Management Sciences* 5(1): 12–22.

Novitasari, Anindita Trinura. 2022. “Kontribusi Umkm Terhadap Pertumbuhan Ekonomi Era Digitalisasi Melalui Peran Pemerintah.” *JABE (Journal of Applied Business and Economic)* 9(2): 184. doi:[10.30998/jabe.v9i2.13703](https://doi.org/10.30998/jabe.v9i2.13703)

Pradana, Feizal Septya, Tony Wijaya, and Agung Utama. 2025. “Pemasaran Digital Dalam Perspektif Akademis: Studi Bibliometrik Literatur Global.” *Studi Akuntansi, Keuangan, dan Manajemen (SAKMAN)* 5(2): 457–67. <https://doi.org/10.35912/sakman.v5i2.5245>

Putra, Adnan Husada. 2018. “Peran Umkm Dalam Pembangunan Dan Kesejahteraan Masyarakat Kabupaten Blora.” *Jurnal Analisa Sosiologi* 5(2). doi:[10.20961/jas.v5i2.18162](https://doi.org/10.20961/jas.v5i2.18162)

Rahmawati, N. (2022). Analisis faktor-faktor yang mempengaruhi adopsi digital marketing pada usaha mikro kecil menengah di Indonesia. *Jurnal Ekonomi dan Bisnis*, 25(3), 101–112.

Robby, Dimas Kurnia, Saepudin, Muhammad Tamamul Khoiry, Ahmad Rifqy Ash-Shiddiqy, Sugiarto Sutomo, and Suhendar. 2024. “Digital Marketing Sebagai Media Branding Sekolah Di Perguruan Muhammadiyah Rawamangun.” *Transformasi dan Inovasi Jurnal Pengabdian Masyarakat* 4(2): 107–17. <https://doi.org/10.26740/jpm.v4n2.p107-117>

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.

Rosita, Dewi, Darius Antoni, and Harun Samsuddin. 2024. “Pengaruh Digital Marketing Dan Digital Service Terhadap Kinerja UMKM.” *Jurnal Nasional Manajemen Pemasaran & SDM* 5(4): 373–82. doi:[10.47747/jnmpsdm.v5i4.2271](https://doi.org/10.47747/jnmpsdm.v5i4.2271)

Sailendra, Sailendra, Suratno Suratno, and Monang Tampubolon. 2020. “Tatakelola Keuangan Dan Akses Permodalan UMKM Terhadap Perbankan Dalam Meningkatkan Dan Pengembangan Nilai Ekonomi Usaha: UMKM Pujasera Cempaka Putih Jakarta Pusat.” *CAPACITAREA : Jurnal Pengabdian kepada Masyarakat Universitas Pancasila* 1(2019): 1–5. [0.35814/capacitarea.v1i01.1456](https://doi.org/10.35814/capacitarea.v1i01.1456)

Suamansi, Adfiyani Fadjar, Maskuri Sutomo, and Sri Wanti. 2025. “Pengaruh Digital Marketing Dan Daya Tarik Terhadap Keputusan Berkunjung (Wisata Paralayang Matantimali).” *Studi Akuntansi, Keuangan, dan Manajemen (SAKMAN)* 5(2): 187–202. <https://doi.org/10.35912/sakman.v5i1.4294>

Suci, Y. R., & Rahman, F. (2021). Digital marketing adoption and SME performance: Evidence from Indonesia. *Journal of Small Business Strategy*, 31(4), 89–101.

Suyadi, Syahdanur, and Susie Suryani. 2018. “Analisis Pengembangan Usaha Mikro Kecil Dan Menengah (UMKM) Di Kabupaten Bengkalis-Riau.” *Jurnal Ekonomi KIAT* 1(Upaya pengembangan umkm): 1. <http://jurnal.unpad.ac.id/sosiohumaniora/article/view/12249/6227>.

Tam, Fung Yi, and Jane Lung. 2025. “Digital Marketing Strategies for Luxury Fashion Brands: A Systematic Literature Review.” *International Journal of Information Management Data Insights* 5(1). doi:[10.1016/j.ijimei.2024.100309](https://doi.org/10.1016/j.ijimei.2024.100309)

Wirawan, W. 2012. *Evaluasi Teori, Model, Standar, Aplikasi Dan Profesi*. Jakarta: PT. Raja Grafindo Persada.

Yakin, Adam Hakul, and Tintin Suhaeni. 2020. “Peranan Orientasi Pasar Dalam Meningkatkan Keunggulan Bersaing Pada UMKM Lampu Gentur Cianjur.” *Jurnal Riset Bisnis dan Investasi* 6(1): 15–22. doi:[10.35313/jrbi.v6i1.1876](https://doi.org/10.35313/jrbi.v6i1.1876)