Financial and Digital Literacy as Moderators in Improving MSME Performance through Financial Management and Digital Marketing in Banyumas

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Keywords
financial management, digital marketing, financial literacy, digital literacy

Abstract

MSMEs play an important role in the Indonesian economy, including in Banyumas Regency, which has more than 89.000 business units. However, the low level of digitalization is still a significant obstacle to improving MSME performance. This study aims to analyze the effect of financial management and digital marketing on MSME performance and examine the role of financial literacy and digital literacy as moderating variables. The method used is quantitative, with a survey approach involving 100 MSME owners selected through the Slovin formula. Data analysis was carried out using the PLS-SEM technique. The results of the study showed that financial management and digital literacy had a significant effect on MSME performance. In contrast, digital marketing and financial literacy did not show a significant effect. In addition, financial literacy and digital literacy did not function significantly as moderating variables. These findings indicate that the importance of literacy has not been fully balanced by the ability of MSME owners to apply it in practice. Therefore, this study provides a practical contribution in the form of recommendations for more applicable and sustainable literacy training and a theoretical contribution to of further research that considers other factors that can affect MSME performance.

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are businesses owned by individuals or with enough employees who fulfil business criteria (Hasanah *et al*., 2020). Based on data from the Ministry of Cooperatives and MSMEs, 65.5 million MSMEs, or 99% of all business units in Indonesia, contribute 60.51% to the Gross Domestic Product (GDP) and absorb 97% of the national workforce. Economic growth is widely regarded as a fundamental metric of a country's macroeconomic performance, and MSMEs play a key role in supporting it (Pracoyo & Pratiwi, 2021). One area with sufficient growth of MSMEs is Regency Banyumas, with a level of MSME growth reaching 25% per year (Pradana, 2022). Although this is based on data from the Communication and Information Service Regency Banyumas, of the 89.533 existing MSMEs, only 6% must utilize digital technology in their operations. With the rapid development of technology, especially in the economic sector (Fitriana & Haryanti, 2024), digital transformation has become essential for MSMEs to increase their competitiveness. The low level of digitalization reflects the significant challenges MSMEs face in the digital transformation era, which can hinder the improvement of MSME performance.

Several factors can influence the performance of MSMEs, including financial management (Ernawati *et al*., 2024), which plays a role in guarding sustainability business and determining achieved or whether or not a company operates its business. Management good finance covers planning, recording, reporting, and control (Anggriani *et al*., 2023). At the same time, some studies show that financial management is significant to the performance of MSMEs (Fauziah *et al*., 2024; Hertadiani & Lestari, 2021; Mali, 2023; Satyawati *et al*., 2023). However, the findings from other studies show results that are not consistent, where financial management is not influential to the performance of MSMEs (Anggriani *et al*., 2023; Urjuan Mamduh & Evaliati Amaniyah, 2024). Inconsistency shows the existence of other strengthening factors or weakening connections between financial management and the performance of MSMEs. One of the reasons for inconsistency is the possibility that it originates from different levels of financial literacy among perpetrator businesses. Differences in understanding and ability to manage finances can strengthen or weaken connections.

In addition to financial management, digital marketing can also play a role in increasing the performance of MSMEs (Alexander, 2023). MSMEs can use digital marketing to reach a broader market at a more economical cost (Asrah *et al*., 2024). Several studies support a positive connection between digital marketing and the performance of MSMEs (Athia *et al*., 2023; Harina & Pahlevi, 2023; Huda & Munandar, 2021; Primadhita *et al*., 2023). However, not all studies produce consistent findings based on the results of the previous research (Rofiq *et al*., 2024), which state that digital marketing does not always have a significant influence, especially for perpetrators who do not have adequate digital skills. Inconsistency results show that the impact of digital marketing on the performance of MSMEs may depend on other factors that influence the ability of the perpetrator business to utilize technology with the optimum ability of the perpetrator business. Understanding and using digital technology significantly determine how effective digital marketing is against the performance of MSMEs, so digital literacy can become a factor that explains the variation.

Based on the theory of Resource Based View (RBV) developed by (Barney, 1991), the advantages of a business depend on the source of its power. The competitive advantages a

company can achieve if MSMEs manage source power internally optimally (Aisyah *et al*., 2022). Financial and digital literacy are sources of internal control that can strengthen the connection between financial management and digital marketing toward the performance of MSMEs. Increasingly, sound financial literacy owned by perpetrator businesses can increase behavior in their finances (Athia *et al*., 2023). Financial literacy gives MSMEs with the knowledge and skills to manage their finances better. Thus, MSMEs can make better decisions about planning and managing business finances (Septiani & Wuryani, 2020). This study uses financial literacy to strengthen the moderation and influence of financial management on MSME performance.

Likewise, digital literacy includes using digital devices to channel, manage, and utilize digital information in an important way for business interests, according to Paul Gister as quoted (Wibowo, 2021). MSME owners with high digital literacy can perform digital marketing better (Ananda *et al*., 2024), so the impact on MSME performance is greater. However, for MSME owners who do not understand digital literacy, digital marketing can be a burden and have no effect (Rosifa & Chayono, 2024). Thus, digital literacy has the potential to be a moderating variable in the relationship between digital marketing and MSME performance. This study aims to analyze the role of financial literacy and digital literacy as moderating variables in the relationship between financial management and digital marketing on MSME performance in the Banyumas Regency. The findings of this study can provide helpful insights for MSME owners and make significant contributions theoretically and practically.

LITERATURE REVIEW AND DEVELOPMENT OF A HYPOTHESIS

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory highlights the importance of utilizing internal resources that have strategic value, are difficult for competitors to imitate, and are not easily replaced as the key to achieving sustainable competitive advantage in a company (Barney, 1991). In the context of MSMEs, these resources are not only limited to physical and financial assets but also include organizational capabilities and intangible resources such as knowledge and skills. The RBV theory states that the effectiveness of a company in utilizing internal capabilities, for example, in financial management and digital marketing, will achieve more optimal results if resources are available. In this case, financial and digital literacy are seen as internal knowledge-based resources that support operational activities and strengthen the influence of these capabilities on MSME performance.

Nurianti (2024) stated that financial and digital literacy play an essential role in increasing the competitiveness of MSMEs. MSME owners with a high level of literacy tend to be more adept at managing business resources efficiently and strategically. Therefore, the RBV theory is raised as a theoretical basis in this study to explain that financial literacy and digital literacy function as moderating variables that strengthen the influence of financial management and digital marketing on MSME performance. The RBV theory states that the resources owned by a company, both tangible and intangible, can encourage companies to develop strategies to achieve competitive advantage and improve performance (Hilmawati & Kusumaningtias, 2021).

MSME Performance

MSME performance is the results the MSME owners achieves in a specific period to achieve the targets set (Hilmawati & Kusumaningtias, 2021). Meanwhile, according to (Anindita & Kustini, 2022), MSME performance can be interpreted as the success achieved by MSME owners in running a business, which can be measured through the advantages achieved in each period.

Financial Management

Financial management is all company activities related to obtaining, allocating, and managing assets according to the company's overall goals (Anggriani *et al*., 2023). This action can be interpreted as making decisions related to finance and aligning individual motivation with company goals (Nurjanah *et al*., 2022).

Digital Marketing

Digital marketing includes branding and utilizing various web-based media, such as blogs, emails, online advertising, and other social networks (Wijayanti & Naim, 2023). Digital marketing refers to promotional efforts carried out through digital platforms to introduce brands owned by a company (Putri & Rahayu, 2022).

Financial Literacy

Financial literacy is the knowledge and personal understanding of the basic principles of finance and business, which allows one to process financial information and make financial decisions (Ferli & Nursanti, 2021). It also encompasses understanding how to manage finances and planning and developing strategies for utilizing financial resources, including capital and income, to achieve economic well-being and quality of life (Muhamad *et al*., 2022). As well as the ability to apply financial principles to manage money and make smart financial decisions. (Heliani & Novitasari, 2024).

Digital Literacy

Digital literacy uses digital technology, communication tools, and networks to access, manage, integrate, analyze, and evaluate data critically (Fauzi, 2024). In line with this, according to Paul Gilster quoted in (Wibowo, 2021), digital literacy is defined as the ability to understand and utilize information in various formats by emphasizing the importance of critical thinking when interacting with digital media rather than just the technical skills to access the media.

Development of a Hypothesis

The Effect of Financial Management on MSME Performance

In the Resource-Based View (RBV) theory, financial management is considered a unique and difficult-to-imitate internal capability, which is a competitive advantage. In running a business, it is essential to manage finances well to achieve quality performance (Suindari & Juniariani, 2020). Thus, financial management is one of the important activities to advance a business (Ernawati *et al*., 2024). This is supported by research (Hertadiani & Lestari, 2021), (Satyawati *et al*., 2023), (Hasanudin, 2023), and (Pasiakan *et al*., 2025), when finances are managed well, MSME owners are better able to allocate resources that support growth.

Therefore, the researcher proposes the following hypothesis:

H1: Financial management has a significant impact on MSME performance.

The Effect of Digital Marketing on MSME Performance

RBV theory considers technological capabilities a strategic asset that can create sustainable advantages. Digital marketing can be done by using Internet media to reach customers directly without being hindered by distance (Wicaksana, 2021). Research by (Primadhita *et al*., 2023) revealed that digital marketing can improve performance at the MSME level and in large companies. This statement is supported by studies conducted by (Murtadlo, 2021), (Rosifa & Chayono, 2024), (Patria *et al*., 2023), and (Huda & Munandar, 2021) that digital marketing has a significant effect on MSME performance. So, the hypothesis proposed:

H2: Digital marketing has a significant impact on MSME performance.

The Effect of Financial Literacy on MSME Performance

Financial literacy is understanding, managing, planning, and developing strategies (Muhamad *et al*., 2022). In the view of RBV theory, financial literacy is seen as an asset based on knowledge that can help make more effective and accurate decisions. A deep understanding of financial literacy will improve the ability of MSME owners to reduce problems that arise (Ernawati *et al*., 2024). Various studies such as those conducted by (Marija et al., 2021), (Urjuan Mamduh & Evaliati Amaniyah, 2024), (Fauzi, 2024), (Nuraeni *et al*., 2024), (Nurdyanto *et al*., 2024), (Dewi & Candraningrat, 2022), (Jamilah & Mardiana, 2024) and (Widadi & Yuttama, 2024) support the argument that a high level of understanding of financial literacy can contribute to business success. So, the hypothesis that will be proposed:

H3: Financial literacy has a significant impact on MSME performance.

The Effect of Digital Literacy on MSME Performance

Lack of understanding in managing online businesses is one of the main obstacles in the digitalization process for MSMEs (Yanti *et al*., 2024). In the RBV theoretical framework, digital skills are included in the skills that support business adaptation and innovation. Research by (Febrianawati *et al*., 2024) states that high digital literacy opens up opportunities for MSME owners to utilize information and technology optimally, thereby increasing overall productivity. Studies such as (Huda & Munandar, 2021), (Syaharani & Febrianto, 2024), (Bidasari *et al*., 2023), (Fadilah, 2024), (Kusuma *et al*., 2024), and (Farhan *et al*., 2022) support the view that digital literacy can contribute to MSME performance. Thus, the hypothesis proposed is:

H4: Digital literacy has a significant impact on MSME performance.

Financial Literacy Moderates the Effect of Financial Management on MSME Performance

Effective financial management is a key component in improving MSME performance, as it helps business owners manage cash flow and design budgets (Suindari & Juniariani, 2020). However, how well MSME owners understand financial concepts and data significantly affects the effectiveness of this management. The Resource-Based View (RBV) theory views financial literacy as an invisible internal resource that can provide a competitive advantage if managed properly. The higher an individual's financial literacy skills, such as understanding money and

investment, the better they will be at managing finances in ther business (Nurjanah *et al*., 2022). This is supported by research (Amin & Pamungkas, 2022), which reveals that a good understanding of financial literacy will support MSME owners thinking when running a business. In other words, the greater their financial knowledge, the better the business is managed, influencing MSME owner's attitudes toward managing finances (Heliani & Novitasari, 2024). Financial literacy acts as a knowledge-based resource that can strengthen the influence of financial management on performance. Therefore, the researcher formulated the following hypothesis:

H5: Financial literacy moderates the effect of financial management on MSME performance.

Digital Literacy Moderates the Effect of Digital Marketing on MSME Performance

Digital marketing is increasingly becoming an essential part of improving the performance of MSMEs, especially during the digitalization era. Adaptation and change are essential for MSMEs to survive, recover, and grow in the business environment, and the market is changing rapidly (Firmansyah *et al*., 2022). However, making the most of digital marketing depends not only on the availability of technology but also on the ability of MSME owners to understand and use the technology. From the Resource-Based View (RBV) theory perspective, digital literacy is considered a valuable and difficult-to-imitate internal resource, so it can be a differentiating element that strengthens marketing strategies. According to (Bidasari *et al*., 2023), business owners understand digital media and actively use digital literacy in business activities, especially in marketing and promotion. In addition, the results of research (Patria *et al*., 2023) show that the use of digital technology, digital literacy skills, and digital marketing impact MSME performance.

H6: Digital literacy moderates the effect of digital marketing on MSME performance.
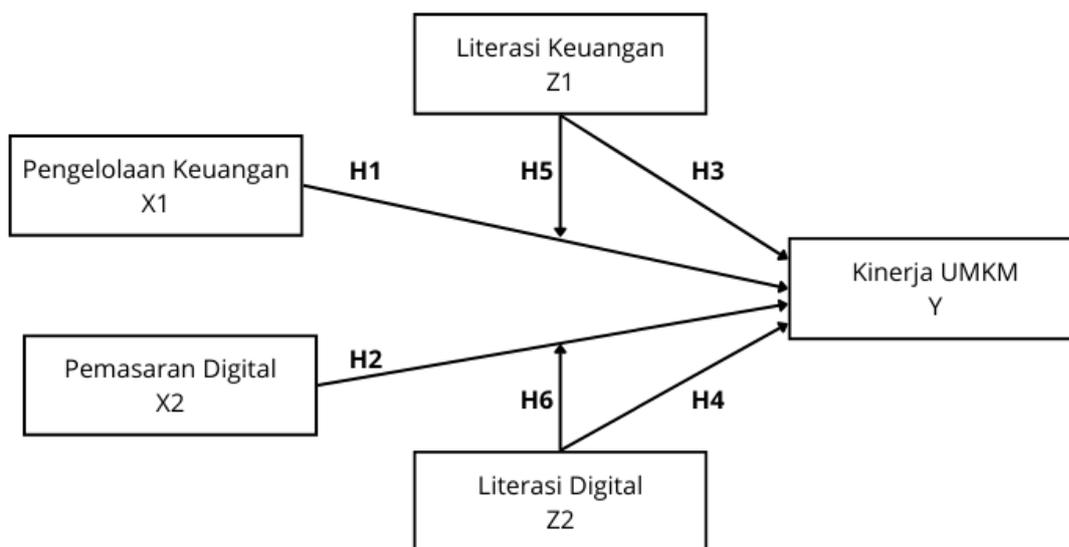
Framework Figure

Figure 1. Framework

RESEARCH METHOD

This study applies a quantitative. The population studied includes all MSME owners in Banyumas Regency who have utilized digital platforms, which is 5.400 units. The sample was determined using the Slovin formula with a 10% margin of error, resulting in 100 respondents. A purposing sampling technique was used, and participants were selected based on specific criteria: MSME owners who actively use digital platforms in their business activities. Data collection was carried out by distributing questionnaires to respondents. A 5-point Likert scale was used to measure respondent responses with the following categories: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Data analysis in this study used the PLS-SEM. Test using Convergent Validity, Discriminant Validity and Composite Reliability, Fornell Larcker, R square, and Hypothesis Test.

Definition Operations and Measurement Variables

Table 1. Indicators Measurement Variables

No	Variables	Definition Operational	Indicator
1.	Financial Management (Fauziah *et al*., 2024)	Financial management includes various business-related activities, such as asset management, administration, planning, and budgeting.	Use budget in planning finance
			Recording transactions and purchases
			Business financial reporting
			Controlling business transactions
2.	Digital Marketing (Wijayanti & Naim, 2023)	Digital marketing includes branding and using various web-based media, such as blogs, WhatsApp sites, email, online advertising, and social networks.	Coordination
			Commerce
			Community
			Content
			Communications
3.	Financial Literacy (OECD, 2016)	Financial literacy combines skills, understanding, attitudes, and behaviors needed to make better financial decisions.	Knowledge finance
			Behavior finance
			Financial attitude
4.	Literacy Digital (MediaSmarts, 2018)	Digital literacy or e-literacy is a concept known as "multi-literacy" which refers to the ability to access, analyze, evaluate, and produce multiple forms of media.	Use
			Understanding
			Create
5.	MSME Performance (Sari *et al*., 2023)	A measuring tool used to evaluate the success of strategies and innovations implemented by companies or entrepreneurs, both from a financial and non-financial perspective.	Margin/Profit
			Profitability
			Production
			Market share
			Competition and innovation product

RESULTS AND DISCUSSION

This study involved 100 MSME owners in Banyumas Regency using digital platforms. Most respondents were male, aged between 31 and 40 years, with most of their educational levels reaching bachelor's degrees and above. The businesses run are in the micro-business category and are engaged in the trade sector. The percentage of respondents can be seen in Table 2.

Table 2. Characteristic Respondents

| Characteristics	Categories	Percentage (%)
Gender	Man	53
	Woman	47
Education	High school graduates to lower	3
	High school graduate	26
	Diploma	25
	Bachelor's degree and above	46
Age	Less than 20 years	1
	20-30 years	24
	31-40 years	56
	More than 40 years	19
Amount employee	5-19 people (Micro business)	64
	20-99 people (Small business)	30
	100-300 people (Intermediate business)	6
Length of business stand	Less than 1 year	6
	1-5 years	46
	6-10 years	35
	11-15 years	8
	More than 15 years	5
Business fields	Manufacturing	29
	Commerce	55
	Service	16
Digital media management	Alone	39
	Family	11
	Staff	45
	3rd Party	5
Financial bookkeeping management	Alone	50
	Family	20
	Staff	25
	3rd Party	5
Online payment	E-wallet/ Digital wallet	41
	QRISS	44
	Bank Transfer	14
	Debit/ credit card	1

Source: Author's Result Data, 2025
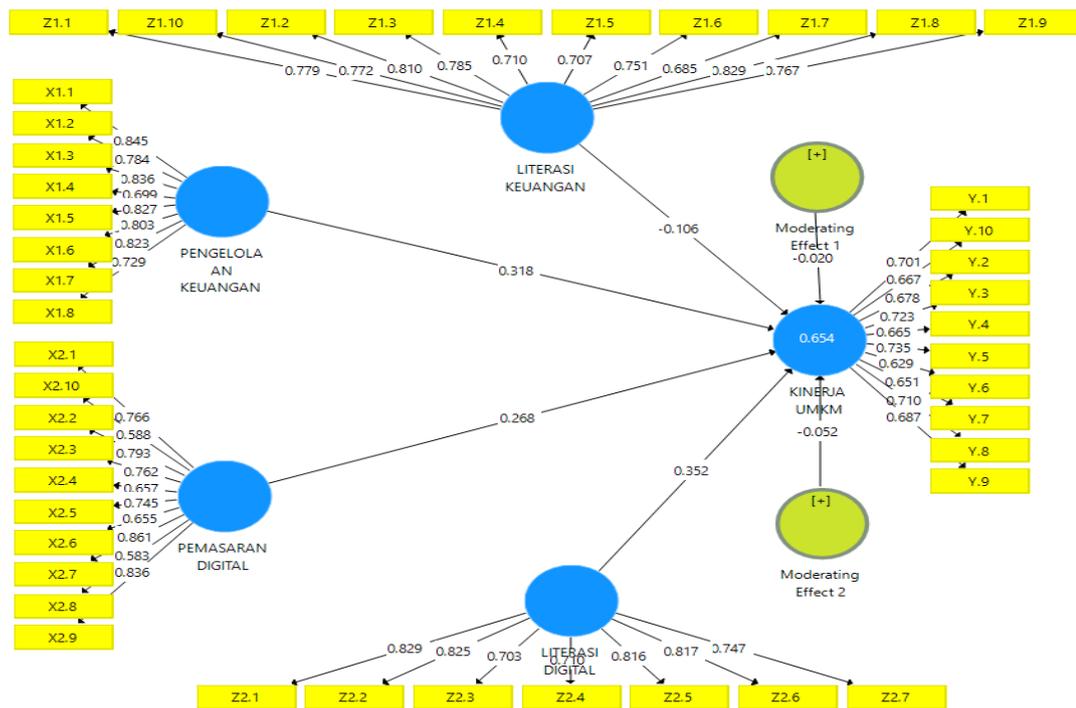
Figure 2. Research Model

Convergent Validity

Convergent validity expands the list of indicators that can be considered valid. An indicator is considered valid if its value is more than 0.07. we can determine each variable indicator's validity value by considering the model test result.

Figure 2 shows the initial model of the study that includes indicators for each variable, namely financial management (X1), digital marketing (X2), financial literacy (Z1), digital literacy (Z2), and MSME performance (Y). However, the indicator results have outer loading below 0.7, which means that the contribution of these indicators to the constructs they represent is inadequate. Furthermore, the steps that are then taken are to delete indicators that have outer loading values below 0.7 and retest.

After the model reconstruction by removing invalid indicators, retesting showed that all remaining indicators had outer loading values above 0.7, so the convergent validity criteria were met. Previously, seventeen indicators showed outer loading values below 0.6 and were declared not to meet the convergent validity requirements. These indicators come from the variables of financial management (X1.4 and X1.8), digital marketing (X2.4, X2.6, X2.8 and X2.10), financial literacy (Z1.4, Z1.7, Z1.9, and Z1.10), digital literacy (Z2.3) and MSME performance (Y.2, Y.4, Y.6, Y.7, and Y.10). The figure below shows a visualization of the test results on the improved model.
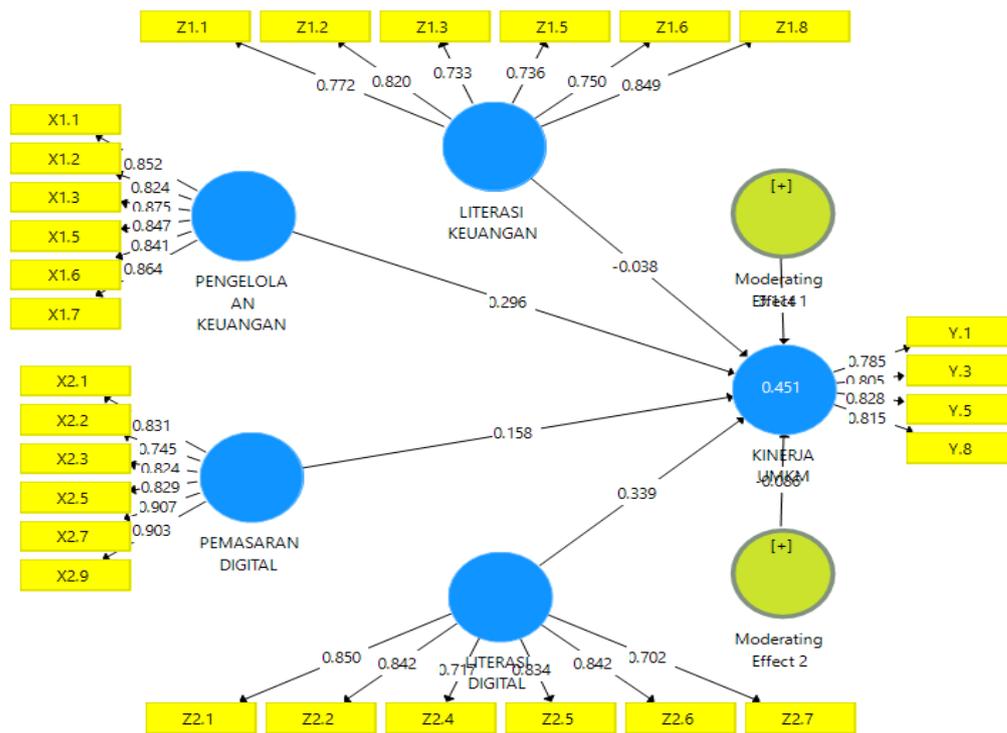
Figure 3. Research Model

Table 3. Discriminant Validity and Composite Reliability Values

Variables	Composite Reliability	Average Variance Extracted (AVE)
X1 Financial Management	0.940	0.723
X2 Digital Marketing	0.936	0.708
Y MSME performance	0.883	0.653
Z1 Financial Literacy	0.902	0.605
Z2 Digital Literacy	0.914	0.640

Source: Data processed by researchers with SmartPLS 3, 2025

Based on the test results in Table 3, each variable analyzed shows an AVE value of more than 0.5, a Cronbach Alpha value above 0.5, and a Composite Reliability value of more than 0.7 (Widarjono, 2015). Thus, all item statements used in this study are reliable or can be relied upon.

The results of the Fornell-Larcker Test presented in Table 4 show that the square root of the Average Variance Extracted (AVE) value for all other variables is greater than the correlation value between these variables. This finding indicates that all statement items used in this study are valid.

Table 4. Discriminant Validity-Fornell Larckel

Variables	MSME Performance	Digital Literacy	Financial Literacy	Digital Marketing	Financial Management
MSME Performance	0.808				
Digital Literacy	0.552	0.800			
Financial Literacy	0.092	0.228	0.778		
Digital Marketing	0.514	0.474	0.143	0.842	
Financial Management	0.477	0.479	0.233	0.428	0.850

Source: Data processed by researchers with SmartPLS 3, 2025

Table 5. R Square Test Results

Variables	R Square	R Square Adjusted
Y MSME Performance	0.451	0.416

Source: Data processed by researchers with SmartPLS 3, 2025

Table 6. Path Coefficients Test Results

Hypothesis	Variables	Original Sample	T Statistic	P Values	Conclusion
H1	Financial Management → MSME Performance	0.296	2.600	0.010	Significant
H2	Digital Marketing → MSME Performance	0.158	1.486	0.138	Not Significant
H3	Financial Literacy → MSME Performance	-0.038	0.227	0.782	Not Significant
H4	Digital Literacy → MSME Performance	0.339	3.073	0.002	Significant
H5	Financial Literacy x Financial Management → MSME Performance	0.114	0.992	0.322	Not Significant
H6	Digital Literacy x Digital Marketing → MSME Performance	-0.086	1.261	0.208	Not Significant

Source: Data processed by researchers with SmartPLS 3, 2025

The results of the R-Square analysis show that this research model explains 45.1% of the variation in MSME performance, with Adjusted R-Square reaching 41.6%.

Based on the hypothesis test in Table 6, only H1 and H4 showed significant results, namely financial management (t = 2.600; p = 0.010) and digital literacy (t = 3.073; p = 0.002) positively influenced MSME performance. Meanwhile, the variables of digital marketing (H2), financial literacy (H3), and the moderating role of financial literacy (H5) and digital literacy (H6) did not show significant results because they had p values > 0.05 and t < 1.99.

Discussion of Hypothesis Results

The Effect of Financial Management on MSME Performance

The results of the first hypothesis test show that financial management positively and significantly impacts MSME performance. In the context of the Resource-Based View (RBV) theory, the ability to manage finances, including planning, recording, reporting, and controlling cash flow, is an internal capability that has high value, is rare, and is difficult for competitors to imitate. The relationship between financial management and MSME performance shows that if financial management is carried out effectively, MSME performance will improve. This study is in line with studies that have been conducted (Fauziah *et al.*, 2024; Hertadiani & Lestari, 2021; Mali, 2023; Pasiakan *et al.*, 2025; Satyawati *et al.*, 2023), which state that management has a positive and significant influence on MSME performance.

The Effect of Digital Marketing on MSME Performance

The results of the second hypothesis test show that digital marketing variables do not significantly impact MSME performance. However, in the Resource-Based View theory, digital technology should function as a strategic resource to create a competitive advantage. This finding indicates that the implementation of digital marketing by MSMEs in Banyumas is still at a less-than-optimal level. Several factors may be the reason for the lack of understanding of technology and the incompatibility of digital marketing strategies with local consumer characteristics. These results align with research (Khoirunnisa, 2024) and (Rofiq *et al.*, 2024).

The Effect of Financial Literacy on MSME Performance

Based on the third financial literacy hypothesis test results, it does not significantly impact MSME performance. Although in RBV theory, financial literacy is considered a knowledge-based asset that can help make good decisions, in reality, MSME owners in the Banyumas Regency have not been able to apply this knowledge to business practices. The results of this hypothesis test are the with research conducted by (Fitria, 2024), (Syaharani & Febrianto, 2024), (Fachrunnisa *et al.*, 2022), (Purwidianti & Tubastuvi, 2019), and (Anggriani *et al.*, 2023), which explain that MSME owner who does not have an understanding of financial literacy can make MSME owner in making business decisions and planning finances well to improve their business.

The Effect of Digital Literacy on MSME Performance

In the fourth hypothesis test results, digital literacy variables positively and significantly impact MSME performance. In the context of RBV theory, digital literacy is considered an invisible or intangible ability that helps business owners access, manage, and utilize technology well for innovation and market adaptation. MSME owners with a high literacy level can reach more consumers and manage digital media more effectively. This finding strengthens the results of studies (Bidasari *et al.*, 2023; Farhan *et al.*, 2022; Huda & Munandar, 2021; Kartika & Ratnamiasih, 2023; Nurdyanto *et al.*, 2024; Syaharani & Febrianto, 2024; Umboh & Didiek, 2023; Zahara *et al.*, 2023) which state that digital literacy affects MSME performance.

Financial Literacy Moderates the Effect of Financial Management on MSME Performance

The results of the hypothesis testing indicate that financial literacy does not significantly

influencing the relationship between financial management and MSME performance. This finding contradicts the initial hypothesis based on the Resource-Based View (RBV) theory, where financial literacy is considered a knowledge-based resource that should maximize financial management's effectiveness in improving business performance.

This lack of significance may indicate that combining financial literacy knowledge with its application in business activities is not optimal. Although 46% of respondents have a bachelor's degree, financial activities such as recording, reporting, and financial analysis have not been fully implemented consistently. The data shows that respondents financial literacy levels still vary, with an average of 3.99 and a standard deviation of 1.04. This indicates a gap in the level of understanding between MSME owners. The lowest value reached 1.0, indicating a group of respondents with a very low literacy level. This inequality can weaken the role of financial literacy as a moderating variable that can strengthen the relationship between financial management and MSME performance.

Digital Literacy Moderates the Effect of Digital Marketing on MSME Performance

The results of the hypothesis testing indicate that digital literacy does not have a significant impact on influencing the relationship between digital marketing and MSME performance. Theoretically, digital literacy is considered a valuable asset according to the Resource-Based View (RBV) theory because it is difficult to imitate and can increase the ability to adapt to technology in marketing. This finding is in line with the results of research conducted by (Athia *et al*., 2023), which also showed that digital literacy does not strengthen the relationship between digital marketing and MSME performance. This indicates that despite digital literacy, several obstacles still hinder the maximum role of digital literacy as a moderating variable. Many respondents rely on third parties to manage digital media without precise digital planning, monitoring, or strategy. Although the respondent's average digital literacy score was relatively high, at 4.24, there was significant variation between respondents, with the lowest score being only 1.0 and the highest reaching 5.0. This indicates an imbalance in digital literacy among respondents, where some business owners do not yet have adequate digital skills, which can contribute to the suboptimal function of digital literacy as a moderation.

CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

Conclusions

This study reveals that financial management and digital literacy positively and significantly influence the performance of MSMEs in Banyumas Regency. This means that the better business owners manage finances, the higher their business performance. Likewise, adequate digital literacy allows MSMEs to adapt to technology, making business activities more efficient and allowing market reach to be more expansive. Meanwhile, digital marketing and financial literacy variables do not show a positive and significant influence on the performance of MSMEs. This indicates that both variables still face challenges in their implementation among MSME owners.

The results of the moderation test also show that financial literacy and digital literacy do not play a significant role in strengthening the relationship between independent variables (financial management and digital marketing) and MSME performance. In other words, these two types of literacy have not been able to become strengthening factors increasing the

effectiveness of financial management and digital marketing strategies on business performance. Therefore, improving MSME performance is generally more determined by the ability to manage finances and master digital technology. In contrast, digital literacy and marketing aspects require further attention and development.

Limitations

This study has limitations in the region's scope and the number of respondents, which are limited to MSME owners in the Banyumas Regency. In addition, based on the R-Square value of 45.1%, there are still 54.9% variations in MSME performance that this research model cannot explain, so there may be other factors that also have an influence but have not been studied. The data collection technique through questionnaires also opens up the opportunity for subjective bias from respondents.

Suggestions

Practical Suggestions

It is recommended that MSMEs in Banyumas Regency improve their competence in professional financial management, not only limited to recording income and expenses but also budgeting, cash management, and systematic financial reporting. In addition, understanding digital technology to support business operations and marketing activities needs to be continuously improved. The local government is expected to expand the scope of training and mentoring programs that focus on improving financial management skills and utilizing digital technology. The training should be applicable, carried out periodically, and aimed at business owners who are not yet digitally independent.

Theoretical Suggestions

The variables in this study only explain part of the variation in MSME performance, so it is recommended that further research examine other variables, such as product innovation or government policy support. In addition, further research can expand the study area and increase the number of respondents to produce more generalizable findings.

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