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The Role of Financial Literacy and Digital Innovation in Enhancing SME Performance

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Abstract

This study investigates how Financial Literacy and Digital Innovation contribute to the performance of Micro, Small, and Medium Enterprises (MSMEs). It fills a gap in empirical research concerning the effects of financial literacy and digital innovation on MSME growth. A conceptual framework grounded in agency theory has been established. The research involved distributing 200 questionnaires to MSME stakeholders in Sidenreng Rappang District, South Sulawesi. Data was gathered through surveys and analyzed using multiple regression to evaluate the influence and interaction of these two factors on MSME performance. Hypotheses were tested via multiple linear regression to assess how independent variables affect the dependent variable. The results show that both financial literacy and digital innovation have a significant individual impact on MSME performance. Moreover, the interaction of financial literacy and digital innovation also positively influences MSME performance. These findings are anticipated to offer valuable insights for policymakers in crafting programs that enhance MSME growth through improved financial literacy and digital innovation. Additionally, academics can further contribute to the advancement of new theories and knowledge in this area.Keywords: Financial Literacy, Digital Innovation, SME Performance.

Introduction

In today's globalized and digitalized world, Micro, Small, and Medium Enterprises (MSMEs) are crucial to Indonesia's economy, particularly in the Sidenreng Rappang District of South Sulawesi. These enterprises not only foster local economic growth but also provide significant employment opportunities within the community (Leigh, 2024; Kesumadewi & Aprilyani, 2024; Ningrum et al., 2024).

Despite their importance, MSMEs encounter numerous challenges, such as inadequate financial literacy and limited adoption of digital innovations. Poor financial literacy can hinder their ability to manage finances effectively, while insufficient adoption of digital innovations can limit their competitiveness and growth potential (Nurjannah & Subur, 2024). Financial literacy is essential for effective financial management and sound decision-making. Prior studies suggest that MSMEs with higher financial literacy levels tend to perform better in business (Beck et al., 2016; Sanistasya et al., 2019).

In this digital era, embracing digital innovations is also vital for the growth and sustainability of MSMEs. Utilizing digital technologies can help MSMEs enhance operational efficiency, broaden their market reach, and improve customer interactions (Baptista & Oliveira, 2015; Sifwah et al., 2024; Maharani & Hasibuan, 2024). Moreover, the adoption of technology contributes to overall performance improvements (Asrini et al., 2023). Theoretical perspectives indicate that strong financial literacy can encourage MSME owners to embrace digital

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innovations. A solid grasp of financial management increases the likelihood that owners will recognize the benefits of digital technologies in enhancing business performance (Klapper et al., 2020; Westerman et al., 2014; Chen et al., 2021; Sutrisno et al., 2023).

According to agency theory, business owners with strong financial knowledge are more likely to manage their enterprises effectively. Thus, financial literacy can help reduce agency costs reduce agency costs and boost business performance (Jensen & Meckling, 1976; Iryanto et al., 2022). While financial literacy and digital innovation have been widely discussed in literature, research on how these two factors interact to influence MSME performance remains limited.

This study aims to bridge this knowledge gap by examining how financial literacy and digital innovation enhance MSME performance. By understanding the relationship between these variables, the research seeks to provide valuable insights for policymakers in developing programs to support MSME growth, particularly in Sidenreng Rappang District.

Financial literacy and digital innovation are key areas of focus in MSME research, particularly concerning improving business performance. Strong financial literacy can enhance decision-making and business outcomes for MSMEs (Lusardi & Mitchell, 2014; Wise, 2013). Similarly, adopting digital technologies can improve operational efficiency and market access (Bharadwaj et al., 2013; Hanna et al., 2011). However, there is a lack of research exploring the interaction between these two factors. Financial literacy can empower MSME entrepreneurs to better utilize digital technologies (Beck et al., 2016; Setyawati et al., 2023; Rizki & Hendarman, 2024; Rujitoningtyas et al., 2025).

In Sidenreng Rappang District, financial literacy can be a crucial foundation for adopting digital innovations, ultimately leading to improved business performance. This study will explore the interplay between financial literacy and digital innovation among MSMEs in the region. Data will be collected through surveys, and multiple regression analysis will be conducted to evaluate the influence and interaction of these two factors on MSME performance. The findings will offer new insights into the factors affecting MSME performance and provide practical implications for policy development to support local economic growth.

Conceptual Framework and Hypothesis Development

Every subtitle, should be bold and have space either before and after the sub title itself. Sub title use sentence case, use bold in the article. The heading is flushed left with the left margin. Financial Literacy on SME Performance Agency Theory, as developed by Jensen & Meckling (1976), suggests that strong financial literacy can reduce information asymmetry between business owners (principals) and their managers or employees (agents). When MSME owners possess a solid understanding of financial management, they are better prepared to embrace digital innovations and effectively monitor their agents' performance (Jenita et al., 2022; Hamzah et al., 2024; Loo et al., 2023). Thus, financial literacy acts as a tool to lower agency costs and enhance overall business performance. Previous studies have shown that MSMEs with higher financial literacy levels often experience better business outcomes, as illustrated by Sanistasya et al. (2019) in their research on the impact of financial literacy and inclusion on small enterprises in East Kalimantan. Additionally, Beck et al. (2016) emphasize how financial innovation can positively affect business performance through adequate financial literacy.

Hypothesis 1: Financial literacy positively and significantly affects SME performance

Digital Innovation on SME Performance Digital innovation is crucial for boosting the performance of MSMEs. Agency Theory posits that information asymmetry between business

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owners and employees can lead to agency issues that negatively affect performance. However, by adopting digital innovations, MSME owners can mitigate these problems through greater transparency and efficiency in management. Research indicates that digital technologies enable MSMEs to enhance operational efficiency, extend market reach, and improve customer interactions, as noted by Baptista & Oliveira (2015) in their study on mobile banking adoption. This research highlights the importance of understanding how digital technologies can enhance business performance. Furthermore, Asrini et al. (2023) indicate that leveraging advanced information technology can further improve performance. Collectively, these studies support the notion that adopting digital technology significantly boosts MSME performance through enhanced efficiency and effectiveness.

Hypothesis 2: Digital innovation positively and significantly affects SME performance

Financial Literacy and Digital Innovation on SME Performance Both financial literacy and digital innovation significantly impact the performance of MSMEs. Strong financial literacy enables business owners to manage risks and make informed decisions, thereby reducing agency problems that often arise in owner-manager relationships, as explained by Jensen and Meckling (1976) in Agency Theory. Meanwhile, digital innovation, as demonstrated by Baptista and Oliveira (2015) and supported by Beck et al. (2020) and Sanistasya et al. (2019), can improve operational efficiency and broaden market access. By effectively leveraging digital technologies and having adequate financial literacy, MSMEs can optimize their performance and achieve sustainable growth.

Based on the theoretical framework and the identification of key research variables, as well as the proposed hypotheses, a conceptual research model has been developed (see Figure 1):

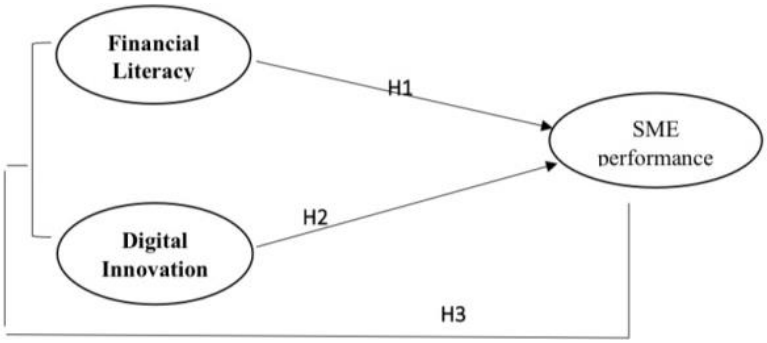

Figure 1. Conceptual Framework

Hypothesis 3: Financial literacy and digital innovation have a positive and significant impact on MSME performance.

Methods

The population refers to the group of individuals or entities that researchers aim to study (Sekaran & Bougie, 2016). In this research, the population consists of MSMEs located in Sidenreng Rappang District, South Sulawesi, Indonesia. Sampling techniques involve selecting a subset from the population to understand its characteristics and to generalize the traits of the broader population (Sekaran & Bougie, 2016).

This study utilizes a non-probability sampling method through a census approach. The sample comprises 200 MSME entrepreneurs. The sample size was calculated using a formula from Hair et al. (2020), given that the total population size is unknown. Observations in the field confirmed that 200 respondents completed the questionnaire. The study employed a questionnaire-based approach, ensuring the confidentiality and anonymity of the participants

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throughout the research process. The analysis method applied is multiple regression analysis, using SPSS version 25.

Table 1 provides an overview of the characteristics of the SME representatives who participated in the survey, detailing the respondents' gender, age, education level, and occupation type.

Table 1. Demographic Characteristics (n = 200)

Characteristic	Criteria	Frequency	Percentage (%)
Sex	Male	123	61,5%
	Female	77	38,5%
Age	< 30 years old	25	12,5%
	31-39 years old	90	45%
	40-49 years old	60	30%
	>50 years old	25	12,5%
Education	Bachelor's Degree (applied science)	30	15%
	Bachelor's Degree (undergraduate)	150	75%
	Master's Degree (graduate)	20	10%
Type of Business	Micro Enterprises	140	70%
	Small Enterprises	40	20%
	Medium Enterprises	20	10%

Source: Processed by Researcher

The majority of respondents in this study were men, namely 61.5% or 123 people, while the remaining 38.5% or 77 people were women. This shows that men manage or own MSMEs more in this study, which has the potential to affect the way business management, business strategies, and innovations are implemented. The performance of MSMEs can be influenced by gender factors, because men and women have different approaches to managing finances, decision-making, and resource management. Based on age, the majority of respondents were 45% or 90 people aged 31 to 39 years, and respondents aged 40 to 49 years were 30% or 60 people. This gives an idea that most of the MSME actors involved in this study are at productive age, which affects decision-making patterns, business strategies, and the level of experience in running a business.

In terms of formal education, the majority of respondents in this study have S1 level education, namely 75% or 150 people. Meanwhile, 20% or 30 people have a high school education level, and 10% or 20 people have a S2 education level. This shows that most of the MSME actors involved in this study have higher education, which may have an effect on how they manage their businesses, the level of financial literacy, and the ability to make business decisions. Meanwhile, a small number of respondents with high school and S2 education also showed variations in education levels that could affect their approach to MSME management. Based on the type of business, the majority of respondents who have micro businesses are 70% or 140 people, while small businesses are 20% or 40 people, and the rest are medium businesses of 10% or 20 people. This proportion reflects the structure of MSMEs that are more dominated by micro enterprises, which may require deeper support regarding financing aspects and growth strategies.

Measurement

In this research, all measurement scales were entirely derived from existing literature, and the questionnaire includes 16 statements aimed at assessing three latent constructs in the

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conceptual model. Financial literacy is measured with five items, using indicators from Huston (2010). Digital innovation is assessed with six items, based on indicators from the OECD (2019) study. SME performance is evaluated using five items. Each construct in the model is measured on a 5-point Likert scale, ranging from Strongly Disagree to Strongly Agree.

Result and Discussion

Validity and realism testing

The validity of the instrument was tested using *the Pearson Correlation technique*. The instrument is considered valid if the *Pearson Correlation* value is greater than 0.35 (Hair et al., 2009). Meanwhile, the reliability test was carried out using *Cronbach's Alpha* technique, where items are grouped into two or more parts, with a reliability value above 0.60 (Hair et al., 2015). The results of validity and reliability tests for all variables, both exogenous and endogenous, can be seen in the table below.

Table 2. Validity and Reality Test Results

Variable	Question	Cronbach's Alpha (>60)	Information	Correlation	Information
Financial Literacy (X1)	X1.1	0,743	Reliable	0.699	Valid
	X1.2			0.751	Valid
	X1.3			0.705	Valid
	X1.4			0.556	Valid
	X1.5			0.390	Valid
Inovasi Digital (X2)	X2.1	0,684	Reliable	0.482	Valid
	X2.2			0.595	Valid
	X2.3			0.683	Valid
	X2.4			0.577	Valid
	X2.5			0.406	Valid
MSME Performance (Y)	Y.1	0,753	Reliable	0.749	Valid
	Y.2			0.715	Valid
	Y.3			0.736	Valid
	Y.4			0.693	Valid
	Y.5			0.482	Valid
	Y.6			0.454	Valid

Source: Data Processing Results (2024)

Based on the table above, all statement items are declared valid, as evidenced by the *Pearson Correlation* value which exceeds 0.35 and reliable with *a Cronbach's Alpha* value that exceeds 0.60.

Analysis of Multiple Linear Regression

The detailed output from SPSS for the regression model equation can be found in Table 2 below:

Table 3. SPSS Output of the Regression Model Equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8,854	3,085		2,870	,005

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	Financial Literacy	,286	,124	,168	2,309	,022
	Digital Innovation	,446	,146	,222	3,051	,003
a. Dependent Variable: SME Performance						

The table above provides the data needed to compute the formula for the suggested multiple linear regression model, particularly from the Unstandardized Coefficients column, specifically the "B" column. The regression model equation can be expressed as follows

$Y = a + \beta 1\ X1 + \beta 2\ X2 + e$
$Y = 8.854 + 0.286\ X1 + 0.446\ X2$
Notation:
Y: Performance of SMEs (dependent variable)
a: Constant value
X1: Financial Literacy (independent variable)
X2: Digital Innovation (independent variable)
β1, β2: Regression Coefficients
e: Error (residual)

Based on the interpretation of the previous regression model, a positive relationship between the independent and dependent variables in this study is observed. However, the presence of such a relationship does not necessarily indicate a significant effect. Therefore, further testing through hypothesis testing is required to assess whether the relationships in the regression model are significant. The hypothesis testing includes the t-test (partial), F-test (simultaneous), and the coefficient of determination (R^2).

t-Test (Partial)

The t-test (partial) is used to determine whether each independent variable in this study individually (partially) has an effect on the dependent variable. This effect is considered significant if the value of the calculated t ($t_{calculate}$) > critical t value (Ttable) and the significance value < 0.05. Conversely, if the value of tcalculate < tTable and the significance value > 0.05, then there is no significant effect.

The Table value is determined using the formula df = n - k, where "df" is the degree of freedom used (0.05 with a two-tailed test), "n" is the number of samples in the study, and "k" is the number of variables in the study (Naufal T, 2022). Therefore, df = 200 - 3 = 197. With a significance level of 0.05, the critical tvalue (Ttable) is 1.653 (see Ttable appendix).

In Table 2 above, the calculated t-values and significance values have been obtained. A complete explanation of the partial hypothesis testing results is as follows:

H1: Based on the analysis results in the table above, the calculated t-value (tcalculate) obtained is 2.309, which is greater than 1.653 and positive. In addition, the significance value is 0.02, which is less than 0.05. Therefore, it can be concluded that financial literacy has a positive and significant partial effect on SME performance. Thus, the hypothesis stating that "Financial Literacy has a positive and significant effect on SME Performance" is accepted.

H2: Based on the analysis results in the table above, the calculated t-value (tCalculate) obtained is 3.051, which is greater than 1.653 and positive. Additionally, the significance value is 0.00, which is less than 0.05. Therefore, it can be concluded that Digital Innovation also has a positive and significant partial effect on SME performance. Thus, the hypothesis stating that "Digital Innovation has a positive and significant effect on SME Performance" is accepted.

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F-Test (Simultaneous)

The F-test evaluates whether both independent variables simultaneously affect the dependent variable in this study. The decision-making criterion hinges on whether the calculated F-value (Fcalculate) exceeds the critical F-value (Ftable) and whether the significance value is below 0.05. If F_{hitung} is higher than Ftable and the significance value is under 0.05, it indicates that both independent variables significantly impact the dependent variable.

To calculate the F_{able} value, the formulas df1 = k - 1 and df2 = n - k can be applied (Oktarezi E, 2016). In this context, "df" stands for degrees of freedom at a significance level of 0.05, "k" represents the total number of variables studied, and "n" refers to the sample size. Thus, df1 = 3 - 1 = 2 and df2 = 200 - 3 = 197. The critical F-value (Ftable) for this analysis, at the intersection of 0.05: 2;197, is 3.04 (refer to the Ftable appendix for more information).

Table 4. F-Test Results (Simultaneous)

ANOVA[a]					
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	183,196	2	91,598	11,570	,000[b]
Residual	1559,684	197	7,917		
Total	**1742,880**	**199**			
a. Dependent Variable: SME Performance					
b. Predictors: (Constant), Digital Innovation, Financial Literacy					

The table shows the results of the hypothesis testing conducted simultaneously. Below is the complete interpretation:

H3: The data in the table above indicates that the calculated F-value (Fcalculate) obtained is 11.570, which is greater than the critical F-value (Ftable) of 3.04, and the value is positive. Additionally, the significance value is 0.000, which is less than 0.05. This confirms that Financial Literacy and Digital Innovation simultaneously have a positive and significant effect on SME performance. Therefore, the hypothesis stating that "Financial Literacy and Digital Innovation have a positive and significant effect on SME Performance" is accepted.

R^2 Coefficient of Determination Test

This test is conducted to evaluate the extent to which the independent variables in this study can explain the variation that affects the dependent variable. The higher the value obtained, the greater the influence of the variation in the independent variables on the dependent variable in this study.

Table 5. R^2 Coefficient of Determination Test Results

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	,773a	,553	,530	3,38917
a. PrPredictors (Constant), Digital Innovation, Financial Literacy				
b.In Independent Variable : SME Performance				

The coefficient of determination (R^2) found in the Adjusted R Square column is 0.530. This indicates that Financial Literacy (X1) and Digital Innovation (X2) account for only 53% of the variation in SME performance (Y), leaving 47% attributed to other factors not examined in this study.

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This study aims to investigate the contribution of Financial Literacy and Digital Innovation to the performance of Micro, Small, and Medium Enterprises (MSMEs), as well as fill in the gaps in empirical research on the influence of these two factors on the growth of MSMEs. By adopting a conceptual framework based on agency theory, this study explores how financial literacy and digital innovation affect the performance of MSMEs, especially in Sidenreng Rappang Regency, South Sulawesi.

Financial Literacy is one of the important factors that affect the performance of MSMEs, because the ability to understand and manage financial aspects well will increase business competitiveness and sustainability. MSMEs that have good financial literacy tend to be able to make more appropriate decisions related to capital management, financial planning, and risk management. Thus, financial literacy plays an important role in improving operational efficiency and profitability of MSMEs.

Meanwhile, Digital Innovation has become one of the increasingly decisive factors in improving the performance of MSMEs, especially in the era of digital transformation. Digital innovation allows MSMEs to access a wider market, improve operational efficiency, and optimize customer service through various digital platforms. The use of digital technology can increase productivity, facilitate more effective marketing, and provide convenience in administrative and financial management. Therefore, digital innovation provides a significant competitive advantage for MSMEs that adopt it.

The results of this study show that both financial literacy and individual digital innovation have a significant influence on the performance of MSMEs. This emphasizes the importance of these two factors in supporting the growth and success of MSMEs. Furthermore, the interaction between financial literacy and digital innovation has also been proven to have a positive impact on the performance of MSMEs, which shows that the two support each other in increasing the effectiveness and efficiency of business operations.

The Policy implications of these findings are critical for policymakers and other stakeholders. To encourage the growth of MSMEs, the government needs to design programs that increase financial literacy and encourage the adoption of digital innovation among MSME actors. Training and mentoring programs that focus on improving financial literacy and the use of digital technology will help MSMEs in optimizing their potential.

The academic contribution of this research lies in the development of new theories and knowledge regarding the influence of financial literacy and digital innovation on the performance of MSMEs. These findings open up opportunities for further research, which could deepen understanding of the mechanism of interaction between these two factors and other factors that affect the growth of MSMEs. Overall, this research provides valuable insights for MSMEs, policymakers, and academics, as well as contributing to the development of theories and practices that can improve the competitiveness of MSMEs through increasing financial literacy and the application of digital innovation.

Synthesizing Financial Literacy and Digital Innovation for MSME Performance Growth

This analysis shows practical survival patterns for enterprises and evolution patterns of decision making along with agency and capability elements that exist within small business environments. Financial literacy maintains an analytic distinction from digital innovation yet these elements form a complicated feedback relationship between them. MSME performance benefits from these two variables through an emergent process which exists due to their interconnected effects on organizational awareness and planning as well as operational execution.

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Begin with financial literacy. The basic essence of technical ability includes margin calculation alongside cash flow interpretation and debt management. The inner capability of entrepreneurs lies beneath their numerical analysis ability which enables them to see through numerical data to understand underlying structures. The financially literate MSME owner possesses powers of strategic anticipation and risk assessment and decision-making abilities which allow them to reject opportunistic choices that threaten their business stability. This ability guides the entrepreneur through turbulent market conditions. The skill provides no uncertainty elimination but helps business owners avoid dangerous mistakes. The lower number of mistakes gives owners additional capacity to follow growth strategies and conduct experiments with business directions and find new opportunities in changing market conditions (Hossain et al., 2024; Banka et al., 2022).

A business manager who grasps credit risk would avoid hasty online borrowing during peak periods because they forecast how much they can repay. A business person trained in determining unit economics will understand whether revenue-building promotions create negative impacts on profit. The skills contribute beyond financial expertise by determining how people view situations and establish their priorities. The ability of MSMEs to perceive their business situation clearly gives them a crucial advantage because it directly determines organizational performance in challenging times (Tirtayasa et al., 2021; Behl et al., 2022; Wanasida et al., 2021). Now consider digital innovation. The widespread use of digital technologies regards them primarily as development tools made up of platforms, apps, and dashboards. Technology tools function independently. Digital tools acquire their worth through proper timing in addition to excellence in fit and defined intentions. Customer retention cannot increase by using a CRM system without proper insight and implementation. An e-commerce platform does not enhance sales numbers unless the entrepreneur masters pricing rules together with delivery systems and digital reliability mechanics. The process of technology adoption requires systematic business restructuring because seeing business operations differently leads to success in technology implementation (Saghafian et al., 2021; Hanelt et al., 2021; Marcon et al., 2022).

Digital innovation produces inconsistent effects because of this reason. When MSMEs use the same digital tool the results will only benefit one business from the group. Technical differences between innovations play no role in outcome differences because entrepreneurs base their success and failure on how they understand problems and what they anticipate. Digitalization represents a system which does not offer instant solutions. Digitalization functions as an established system which requires organized modifications of work routines even though these changes frequently lead to distress. Without deliberate organizational mindset toward planned change efforts transform into superficial matching instead of genuine advancement (Zainuddin et al., 2024; Sharma & Kohli, 2024).

This research creates its main finding through studying the intersection of these two components. Financial stability from literacy gives MSMEs the ability to select better methods of innovation. The limitations it imposes accommodate practical discriminating capabilities. The financially literate entrepreneur makes an investment assessment based on whether new applications will strengthen or deplete their operational cash reserves. Financial tools that carry out automated inventory management and payments expose hidden patterns to users which enhances their financial insight. The relationship between financial sense and digital choices results in a continuous cycle where digital outputs enhance financial understanding (Lukman et al., 2024; Challoumis, 2024; Lyons & Kass-Hanna, 2021).

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The connection operates through an established structure that was not created randomly. MSMEs achieve meaningful growth through system-to-system communication between their operational elements. Financial understanding functions as a system alongside digital engagement which operate independently. When linked, they create momentum. A quieter long-term growth develops from connecting financial understanding with digital engagement which results in reduced reworks along with superior forecasts and fewer disasters while improving supplier relationships. Performance exists as a real-life operational standard of conducting business effectively (Malhotra, 2005).

The implications here are urgent. Too many policy interventions still treat financial literacy and digital readiness as parallel tracks. The educational content differs among workshops because they receive funding from separate agencies with individual evaluation standards. Operating realities show that MSMEs do not exist separately from each other. Any payment platform loses its value when the owner fails to track their receivables. A loan system creates risks whenever recipients fail to differentiate between the terms of cash and profit. Integrated training methods which pair digital accounting topics with cost analysis instruction and mobile banking knowledge with liquidity planning information create educational solutions that generate benefits beyond their assumed sum. Such integrated programs transform the thinking patterns of MSME actors (Mehchy et al., 2023; Setiadi et al., 2024).

Systemwide coordination at the ecosystem level appears justified as a necessary approach. Fintech providers must create interfaces based on the understanding that users have limited financial understanding because simplicity functions as a basic requirement. Academic institutions need to stop preparing students with coding abilities without adequate budgeting capabilities. The assumption that digital training adapters understand digital tools properly is incorrect. The ecosystem needs to shift its fixation on buzzwords into an ability to confirm that tools create better decisions (Meraj et al., 2022; Einola & Khoreva, 2023). A persistent reductionist approach receives academic challenge within this research. Success evaluation tends to occur in limited isolated terms which ignore complex environmental aspects. True world MSME performance remains illogical since it manifests through clashes of competing interests and spontaneous solutions and unacceptable trade-offs. Supervisionas surveys alone fail to fully reflect performance yet models adopting interreplaceable practices allow scientists to understand this phenomenon (Beck et al., 2016; Bharadwaj et al., 2013). The research outcome extends beyond theory validation by leading us to rethink our research patterns.

There remains much to explore. The business dynamics within agriculture-based MSMEs differ compared to retail-based MSMEs regarding the level of synergy they experience. The relative density of infrastructure affects which factor becomes the leader and which one takes the follower position. The study model must include how age groups and gender impact the findings. MSMEs beginning their operations tend to show proficiency in digital technologies although they face financial security challenges. The debt-management strategy of female entrepreneurs tends to be conservative despite their limited presence in digital_transaksi environments. All these pathways need further examination. Two factors work together to create performance impacts because financial literacy and digital innovation exist as intertwined performance levers. These concepts form a single system that provides distinct perspectives to understand and address situations. The real value of this combination emerges through the way they relate to each other. Development occurs through concrete mental and methodological transformation rather than in developing programs.

Conclusion

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Financial literacy significantly enhances the performance of Micro, Small, and Medium Enterprises (MSMEs). This suggests that greater knowledge and understanding of financial management among MSME owners—covering areas like money management, financial planning, and familiarity with financial products—lead to improved business performance. This demonstrates a strong connection between financial literacy and the success and growth of MSMEs.

Moreover, digital innovation positively affects MSME performance. The adoption of digital technologies or platforms in business operations significantly boosts MSME efficiency, sales growth, and market competitiveness. The more effectively MSMEs utilize digital innovations, the better their overall performance. In addition, the combined effect of financial literacy and digital innovation is positive and significant for MSME performance. A thorough understanding of financial management, when paired with the adoption of digital technologies, enhances operational efficiency, sales growth, and competitive capability. These two elements work together to promote business success and growth.

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