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The Role of Financial Literacy, Management Skills, and Digital Capital Access in Enhancing Business Sustainability in the Digital Economy

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A B S T R A C T

The rapid growth of the digital economy has driven business actors to enhance their financial capabilities, managerial competencies, and accessibility to digital financing as essential strategies for sustaining business continuity. This study investigates the effects of financial literacy, managerial skills, and digital capital access on the sustainability of MSMEs. A quantitative research approach was employed using a survey method involving 150 MSME owners selected through purposive sampling. Data were gathered through structured questionnaires and examined using multiple linear regression analysis. The findings reveal that financial literacy, management skills, and digital capital access significantly contribute to business sustainability, with managerial skills demonstrating the strongest influence among the examined factors. These results highlight the importance of integrating financial knowledge, managerial capacity development, and inclusive digital financing support to strengthen MSME resilience and promote long-term sustainable growth

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INTRODUCTION

Business sustainability in the digital economy depends on financial resilience, operational continuity, competitiveness, and adaptability to technological change. MSME sustainability is shaped by internal capabilities, such as financial literacy and managerial competence, and external resources, including capital access and digital financial services. Therefore, sustainable MSMEs require the integration of financial knowledge, managerial capability, and access to digital financial infrastructure.

Financial literacy, management skills, and digital capital access are key factors supporting MSME sustainability. Financial literacy improves financial decision-making and resource management, while management skills enable effective planning, operational control, and productive use of resources. Digital capital access provides flexible financing and operational benefits through fintech and other digital financial services, but its effectiveness depends on adequate financial literacy and managerial capability. Together, these interconnected factors strengthen business stability, growth, adaptability, and long-term sustainability while helping MSMEs manage the risks of digital finance responsibly.

Based on previous studies, this research conceptualizes financial literacy, management skills, and digital capital access as key determinants affecting MSME business sustainability in the digital economy. Financial literacy represents the cognitive ability required to make effective financial decisions, management skills reflect the operational and strategic capability to manage business resources, and digital capital access represents technology-enabled external support that expands financing opportunities. Existing literature still presents inconsistent findings, particularly regarding the role of fintech and digital financial access in determining MSME sustainability. Therefore, this study aims to simultaneously examine the influence of these three factors in order to identify the variables that contribute most significantly to business sustainability. Conceptually, MSMEs with higher financial literacy, stronger managerial capabilities, and responsible utilization of digital capital access are expected to have greater capacity to maintain sustainable business operations.

LITERATURE REVIEW

Business Sustainability in the Digital Economy

Business sustainability in the digital economy involves more than maintaining business continuity; it includes preserving operational performance, managing risks, adapting to changing markets, and leveraging technology to create long-term value. For MSMEs, sustainability depends on the interaction between internal competencies and external support systems that enable productivity, competitiveness, and resilience. Hilmawati and Kusumaningtias (2021) emphasized that financial literacy is a fundamental factor supporting strong performance and sustainable MSME development. Therefore, in the digital era, MSMEs need to develop not only marketing and sales capabilities but also financial management, digital service utilization, and adaptive business strategies that respond to technological advances and changing consumer behavior.

Financial Literacy and Business Sustainability

Financial literacy is the ability of business actors to understand financial principles, manage cash flow, plan finances, monitor debt, assess financing risks, and make appropriate financial decisions. For MSMEs, it is a fundamental capability supporting business stability, as failures may result from poor financial records, inability to separate personal and business finances, and inappropriate financing decisions. Hilmawati and Kusumaningtias (2021) found that financial literacy significantly contributes to MSME performance and sustainability, while Sugita and Ekayani (2022) confirmed its positive influence on MSME sustainability in the fashion sector in Denpasar City. Thus, stronger financial literacy enables MSMEs to manage resources effectively, reduce financial uncertainty, maintain operational continuity, and strengthen long-term business sustainability.

Management Skills and Business Sustainability

Management skills are essential strategic capabilities that enable MSME actors to effectively plan, organize, control, and evaluate business operations. These skills help transform financial resources, knowledge, and organizational capabilities into effective decisions and practices, thereby improving business performance and supporting long-term sustainability.

Digital Capital Access and Business Sustainability

Digital capital access enables MSMEs to obtain financing through fintech, digital lending, online financing, and digital credit services, while improving transaction efficiency, operational flexibility, and business expansion. However, it does not automatically ensure business sustainability; its effectiveness depends on appropriate financing choices, financial risk management, and productive capital allocation.

Integrasi Financial Literacy, Management Skills, dan Digital Capital Access

The interaction between financial literacy, management skills, and digital capital access supports MSME sustainability. Financial literacy enables effective financial evaluation and risk management, management skills ensure proper resource allocation and strategic decisions, while digital capital access provides broader and more flexible financing opportunities. However, excessive digital financing without adequate financial literacy and financial control may create unsustainable debt. Therefore, business sustainability depends on integrating internal capabilities with technology-driven financial access.

Hypothesis Development

Based on the literature review, financial literacy, management skills, and digital capital access are expected to positively influence business sustainability. Financial literacy supports cash flow, cost, risk, and financing decisions; management skills improve resource management, strategy, and operational effectiveness; while digital capital access expands and accelerates financing opportunities. Together, these three factors are expected to strengthen business sustainability through complementary financial, managerial, and digital capabilities.

H1: Financial literacy has a positive and significant effect on business sustainability.
H2: Management skills have a positive and significant effect on business sustainability.
H3: Digital capital access has a positive and significant effect on business sustainability.
H4: Financial literacy, management skills, and digital capital access simultaneously have a positive and significant effect on business sustainability.

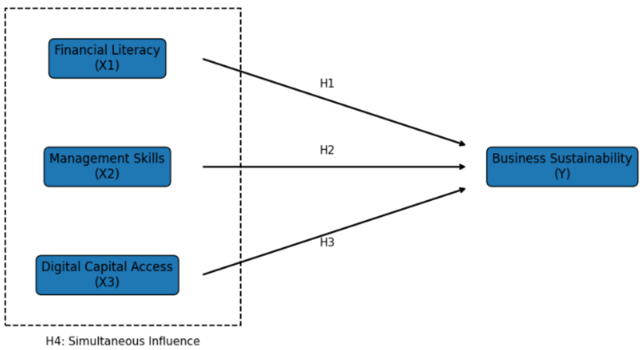

Figure 1. Framework

METHODOLOGY

Types of Research

This study employs a quantitative explanatory survey design to examine the effects of financial literacy, management skills, and digital capital access on business sustainability. Primary data are collected from MSME actors through structured questionnaires and analyzed using statistical hypothesis testing, consistent with previous studies on financial literacy, fintech, financial accessibility, and MSME sustainability.

Population and Sample

The study targeted active MSME owners with experience using digital financial services or financing facilities. A total of 150 respondents were selected through purposive sampling based on criteria including at least one year of business operation, active involvement in business decision-making, knowledge or experience in digital financial services, and willingness to complete the questionnaire. This sampling method was chosen to ensure respondents had relevant experience in financial literacy, managerial capability, and digital capital access, consistent with previous MSME sustainability studies by Sugita and Ekayani (2022) and Maulana et al. (2022).

Research Instruments

The research instrument is in the form of a closed questionnaire that is compiled based on indicators from previous research and adjusted to the context of the digital economy. Each item is measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The financial literacy variable was measured through indicators of financial management understanding, financial recording, budget planning, debt management, and the ability to evaluate financial risks, adapted from Hilmawati and Kusumaningtias (2021), Sugita and Ekayani (2022), and Kumar et al. (2024). The management skills variable was measured through indicators of business planning, resource organization, decision-making, operational control, and performance evaluation, which were developed from Suyono (2022), Pandak and Nugroho (2023), and Aripin and Zuhriyah (2025). The variables of digital capital access are measured through the ease of obtaining digital financing, the use of fintech, credit accessibility, the speed of the financing process, and the suitability of financing with business needs, which refers to Maulana et al. (2022), Asmoro et al. (2025), and Rachman et al. (2025). Business sustainability is measured through the ability of businesses to maintain operations, revenue stability, business growth, digital adaptation, and resilience to risks, as relevant to the studies of Hilmawati and Kusumaningtias (2021), Pratiwi et al. (2024), and Sugita and Ekayani (2022).

The validity of the instrument was tested through two stages, namely content validity and empirical validity. The validity of the content is carried out by requesting an assessment from management experts, MSME finance, and research methodology to ensure the suitability of the statement items with the measured construct. Empirical validity is carried out through the item-total correlation test, provided that the item is declared valid if the correlation value is greater than the r-table value or has a significance value below 0.05. The reliability of the instrument was tested using Cronbach's Alpha, with the criterion of reliability if the alpha value was above 0.70. Validity and reliability tests are carried out before hypothesis testing so that the analyzed data meet the measurement feasibility standards in quantitative research.

Data Collection Procedure

The research procedure consisted of five stages: preparing the research design based on the problem formulation, theoretical framework, and hypothesis; developing and reviewing a questionnaire instrument based on indicators from previous research; conducting a limited trial to assess readability, language clarity, and item consistency;

distributing questionnaires to 150 eligible MSME respondents in person or online with information on research objectives, data confidentiality, and voluntary consent; and finally checking data completeness, filtering inconsistent responses, coding, and preparing the data for statistical analysis.

Data Analysis Techniques

The data were analyzed quantitatively using IBM SPSS Statistics through descriptive analysis, validity and reliability tests, and classical assumption tests. Descriptive analysis examined respondent characteristics and response patterns, while validity and reliability tests ensured accurate and consistent measurement. Before regression analysis, normality, multicollinearity, and heteroscedasticity tests were conducted to confirm model suitability.

Hypothesis testing was conducted using multiple linear regression analysis because this study examines the effect of several independent variables on a single dependent variable. The regression model applied in this study is formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

The regression model examines the effects of financial literacy, management skills, and digital capital access on business sustainability. The **t-test** assesses the partial effects of each variable, the **F-test** evaluates their simultaneous effects, and **R^2** measures how well the model explains variations in business sustainability. The results are interpreted objectively by linking statistical findings with relevant theories and previous studies.

RESEARCH RESULT

Respondent Characteristics

This study included 150 MSME actors who fulfilled the predetermined respondent criteria, including having operated a business for a minimum of one year, being actively involved in business decision-making processes, and possessing experience or knowledge regarding the utilization of digital financial services. The questionnaire data collected from respondents were initially reviewed through a data screening process to ensure completeness and suitability for further statistical analysis. Based on the data tabulation results, all collected responses were considered valid for analysis, as no incomplete responses, missing data, inconsistent answers, or responses that failed to meet the established research criteria were identified.

Table 1. Respondent Characteristics

Features	Category	Frequency	Percentage
Gender	Male	68	45,3%
	Women	82	54,7%
Age	< 25 years old	18	12,0%
	25–34 years old	57	38,0%
	35–44 years old	49	32,7%
	> 44 years old	26	17,3%
Length of effort	1–3 years	55	36,7%
	4–6 years	61	40,7%
	> 6 years old	34	22,6%
Type of business	Culinary	54	36,0%
	Fashion	31	20,7%
	Services	35	23,3%
	Trade	30	20,0%

Digital services used	QRIS/e-wallet	66	44,0%
	Mobile banking	39	26,0%
	Fintech lending	26	17,3%
	Marketplace financing	19	12,7%

Based on Table 1, respondents were dominated by female business actors as many as 82 people or 54.7%, while male respondents amounted to 68 people or 45.3%. In terms of age, the majority of respondents were in the age range of 25-34 years as many as 57 people or 38.0%. This shows that most of the MSME actors in this study are at a productive age and are relatively close to the use of digital technology in business activities.

Based on the length of business, the majority of respondents have been running a business for 4–6 years, with 61 people or 40.7%, indicating sufficient experience in managing businesses and dealing with market dynamics. By type of business, the culinary sector is the largest group with 54 respondents or 36.0%. Meanwhile, QRIS/e-wallet was the most widely used digital service, with 66 respondents or 44.0%, showing that digital payment services are more commonly used than digital financing services such as fintech lending or marketplace financing.

Descriptive Statistics of Research Variables

Descriptive statistics were used to describe the tendency of respondents' responses to the variables of financial literacy, management skills, digital capital access, and business sustainability. Each variable was measured using a five-point Likert scale, with average values then categorized into very low, low, medium, high, and very high levels.

Table 2. Descriptive Statistics of Research Variables

Variabel	N	Minimum	Maximum	Mean	Std. Deviation	Category
Financial Literacy	150	2.80	5.00	4.03	0.55	Height
Management Skills	150	2.90	5.00	4.12	0.52	Height
Digital Capital Access	150	2.60	5.00	3.88	0.60	Height
Business Sustainability	150	2.75	5.00	4.07	0.54	Height

Descriptive statistical results show that all variables are in the high category. The management skills variable obtained the highest average score of 4.12. This shows that MSME actors have a strong tendency to carry out managerial functions, such as business planning, resource organization, decision-making, operational control, and performance evaluation.

Business sustainability had the highest average score of 4.07, indicating good operational stability and adaptability. Financial literacy scored 4.03, reflecting good financial management and risk-control abilities. Digital capital access scored 3.88, remaining in the high category but the lowest among the variables, showing that its utilization is good but weaker than managerial ability and financial literacy.

Instrument Validity and Reliability Test Results

Validity tests are carried out to ensure that each questionnaire item is able to measure the variables studied. The results of the validity test showed that all items in the variables of financial literacy, management skills, digital capital access, and business sustainability were declared valid because they had an item-total correlation value above the set minimum limit.

Table 3. Instrument Validity Test Results

Variabel	Number of Items	Correlation Value Range	Remarks
Financial Literacy	5	0.542 - 0.744	Valid
Management Skills	5	0.586 - 0.781	Valid
Digital Capital Access	5	0.557 - 0.763	Valid
Business Sustainability	5	0.571 - 0.790	Valid

Based on Table 3, all statement items on each variable are declared valid. This shows that the research instrument has been able to measure constructs that are in accordance with the research objectives.

Furthermore, a reliability test was carried out to determine the consistency of respondents' answers to items in each variable. The instrument is declared reliable if Cronbach's Alpha value is greater than 0.70.

Table 4. Reliability Test Results

Variabel	Number of Items	Cronbach's Alpha	Remarks
Financial Literacy	5	0.846	Reliable
Management Skills	5	0.881	Reliable
Digital Capital Access	5	0.858	Reliable
Business Sustainability	5	0.872	Reliable

The results of the reliability test showed that all variables had a Cronbach's Alpha value above 0.70. Thus, the research instrument has a good level of internal consistency and is suitable for use in advanced analysis.

Classical Assumption Test Results

Classical assumption tests are performed before multiple linear regression analysis to ensure that the regression model meets the statistical requirements. The tests carried out included normality, multicollinearity, and heteroscedasticity.

Table 5. Normality Test Results

Testing	Statistical Value	Significance	Remarks
Kolmogorov-Smirnov	0.061	0.200	Normal

The results of the normality test showed a significance value of 0.200. This value is greater than 0.05, so the residual data is declared to be normally distributed. Thus, the regression model meets the assumption of normality.

Table 6. Multicollinearity Test Results

Independent Variables	Tolerance	LIVE	Remarks
Financial Literacy	0.613	1,631	Multicollinearity does not occur
Management Skills	0.584	1,712	Multicollinearity does not occur
Digital Capital Access	0.627	1,594	Multicollinearity does not occur

The results of the multicollinearity test showed that all independent variables had a tolerance value greater than 0.10 and a VIF value of less than 10. Thus, there is no problem of multicollinearity between independent variables in the research model.

Table 7. Heteroscedasticity Test Results

Independent Variables	Significance	Remarks
Financial Literacy	0.318	Heteroscedasticity does not occur

Management Skills	0.247	Heteroscedasticity does not occur
Digital Capital Access	0.391	Heteroscedasticity does not occur

The results of the heteroscedasticity test showed that all independent variables had a significance value greater than 0.05. Thus, the regression model does not experience heteroscedasticity problems. Based on the results of the classical assumption test as a whole, the research data met the requirements to be analyzed using multiple linear regression.

Multiple Linear Regression Analysis Results

Multiple linear regression analysis was used to test the influence of financial literacy, management skills, and digital capital access on business sustainability. The results of data processing showed that all independent variables had a positive regression coefficient. This means that increasing financial literacy, management skills, and digital capital access is followed by increasing business sustainability.

Table 8. Multiple Linear Regression Results

Variabel	B	Std. Error	Beta	t-count	Say.
Constant	0.421	0.206	-	2.044	0.043
Financial Literacy	0.218	0.071	0.223	3.070	0.003
Management Skills	0.392	0.067	0.421	5.851	0.000
Digital Capital Access	0.276	0.073	0.284	3.781	0.000

Based on Table 8, financial literacy has a regression coefficient of 0.218 with a significance value of 0.003, management skills have a coefficient of 0.392 with a significance value of 0.000, and digital capital access has a coefficient of 0.276 with a significance value of 0.000. These results show that financial literacy, management skills, and digital capital access each have a positive and significant effect on business sustainability.

The management skills variable has the highest standard beta coefficient (0.421), showing that management skills are the most dominant factor in improving business sustainability compared to financial literacy and digital capital access. These findings align with research indicating that management skills are the dominant factor in strengthening MSME sustainability in the digital economy era.

Partial Hypothesis Testing Results

Partial hypothesis testing was carried out to determine the influence of each independent variable on business sustainability. The test results show that all partial hypotheses are accepted.

Table 9. Partial Hypothesis Testing Results

Hipotesis	Variable Relationships	t-count	Say.	Verdict
H1	Financial Literacy → Business Sustainability	3.070	0.003	Accepted
H2	Management Skills → Business Sustainability	5.851	0.000	Accepted
H3	Digital Capital Access → Business Sustainability	3.781	0.000	Accepted

The results of the H1 test show that financial literacy has a positive and significant effect on business sustainability, meaning that better understanding of financial management, business registration, budget planning, and risk control increases the opportunity for MSME sustainability. The H2 test shows that management skills have a positive and significant effect on business sustainability, indicating that the ability to plan, organize, control, and evaluate business activities helps maintain operations and increase business resilience. The H3 test shows that digital capital access has a positive and significant effect on business sustainability, meaning that easier access to digital financing, fintech services, and technology-based capital sources supports business sustainability.

Simultaneous Hypothesis Testing Results

Simultaneous hypothesis testing was carried out to determine the influence of financial literacy, management skills, and digital capital access together on business sustainability.

Table 10. Simultaneous Test Results

Model	Sum of Squares	df	Mean Square	F-count	Say.
Regression	31,487	3	10,496	96,614	0,000
Residual	15,861	146	0,109	-	-
Total	47,348	149	-	-	-

The results of the simultaneous test showed an F-count value of 96.614 with a significance of 0.000. The significance value is less than 0.05, so it can be stated that financial literacy, management skills, and digital capital access simultaneously have a positive and significant effect on business sustainability. Thus, H4 was accepted.

Coefficient of Determination

The determination coefficient is used to determine the extent of financial literacy, management skills, and digital capital access in explaining the variation in business sustainability.

Table 11. Determination Coefficient Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.815	0.665	0.658	0.329

The results of the analysis showed an R Square value of 0.665. This means that financial literacy, management skills, and digital capital access are able to explain the variation in business sustainability by 66.5%. The remaining 33.5% is explained by other factors outside the research model, such as entrepreneurial orientation, product innovation, government support, digital competence, quality of market network, and level of business competition. The adjusted R Square value of 0.658 shows that the research model has strong explanatory ability after adjusting for the number of independent variables and the number of respondents.

Key Research Findings

The results show that all independent variables positively and significantly affect business sustainability. Financial literacy strengthens MSME financial management, management skills are the most dominant factor, and digital capital access supports sustainability through easier digital financing.

Table 12. Summary of Hypothesis Testing Results

Hipotesis	Hypothesis Statement	Results
H1	Financial literacy has a positive and significant effect on business sustainability	Accepted
H2	Management skills have a positive and significant effect on business sustainability	Accepted
H3	Digital capital access has a positive and significant effect on business sustainability	Accepted

H4	Financial literacy, management skills, and digital capital access simultaneously have a positive and significant effect on business sustainability	Accepted

An important finding in this study is that management skills have the strongest influence compared to financial literacy and digital capital access. This shows that business sustainability does not only depend on financial understanding and access to digital capital, but also on the ability of business actors to manage resources, make decisions, control operations, and adapt business strategies to changes in the digital economy.

Differences in Findings with Previous Research

The results show that digital capital access has a positive and significant effect on business sustainability, partly because it includes financing ease, credit accessibility, speed, and suitability to business needs. Management skills are the most dominant factor, as they enable MSMEs to use financial literacy and digital capital more effectively to maintain, develop, and adapt their businesses. Overall, all hypotheses were accepted, confirming that financial literacy, management skills, and digital capital access influence MSME sustainability, with management skills having the strongest effect.

DISCUSSION

The study found that financial literacy, management skills, and access to digital capital have a positive and significant effect on MSME business sustainability, collectively explaining 66.5% of sustainability outcomes, while the remaining 33.5% is influenced by factors such as product innovation, entrepreneurial orientation, government support, digital competence, market networks, and business competition. These findings indicate that MSME sustainability in the digital economy results from the interaction of financial capacity, managerial capabilities, and access to digital financing, consistent with the Resource-Based View, which considers knowledge, skills, and resource access as strategic assets for competitiveness and sustainability. Financial literacy enables better cash flow management, financial recording, budgeting, debt control, and risk evaluation, helping MSME actors make rational financial decisions, manage operational pressures, and improve their ability to survive and grow.

However, financial literacy was not the most dominant factor, showing that financial knowledge alone is insufficient to ensure business sustainability without resource management, business strategy implementation, and adaptation to market dynamics. In MSME practice, understanding financial recording, cash management, and debt control must be supported by management discipline, operational consistency, and decision-making ability. Therefore, financial literacy is an important prerequisite but not the sole determinant of business sustainability, consistent with Ratnawati et al. (2025), which positions financial literacy and digital financial inclusion as factors that strengthen financial well-being and business sustainability rather than stand-alone factors.

The second finding shows that management skills are the most dominant variable in improving business sustainability, as sustainability in the digital economy depends on the ability to plan, organize, control, evaluate, and adjust business strategies. Management skills transform financial literacy and access to capital into productive business actions, enabling MSME actors to better manage stock, labor, costs, marketing, and changes in consumer behavior. These findings support Suyono and Zuhri (2022), who found that managerial skills affect MSME performance, and Pandak and Nugroho (2023), who found that financial technology and managerial skills affect MSME financial performance.

Management skills have the strongest influence because business sustainability depends on the ability to integrate, adapt, and effectively use resources in a changing digital environment. While digital capital provides funding and financial literacy supports risk understanding, management skills determine how resources are utilized, decisions are implemented, and businesses adapt. Digital capital access also positively and significantly supports MSME sustainability through easier financing, accessible credit, faster processes, and suitable funding from fintech, marketplace financing, mobile banking, e-wallets, and digital credit services. These findings are consistent with previous studies emphasizing management skills, financial literacy, financial technology, financial inclusion, and digital financial access in strengthening MSME sustainability and resilience.

However, the results differ from Maulana et al. (2022), who found that fintech has no effect on business sustainability, although financial literacy and financial inclusion have a positive effect. The difference may be due to the broader concept of digital capital access used in this study, which includes digital financing, credit accessibility, process speed, and suitability of capital to business needs, rather than merely fintech use. Differences may also be influenced by respondent characteristics, digital maturity, business type, and MSME readiness to manage financing risks. Yue et al. (2022) also warn that while digital finance can expand credit access, it may increase the risk of debt traps without adequate financial controls.

Simultaneously, the results of this study prove that financial literacy, management skills, and digital capital access complement each other in improving business sustainability. Financial literacy shapes the quality of financial decisions, management skills direct the business management process, while digital capital access expands opportunities to obtain capital. The combination of the three results in a more complete business sustainability model because it includes the dimensions of knowledge, capabilities, and access to resources. These findings reinforce the view that the sustainability of MSMEs in the digital economy is not enough to be driven by digitalization, but also requires managerial readiness and financial prowess. Rachman et al. (2025) show that financial literacy and financial inclusion are related to the sustainability of MSMEs through the use of fintech as an intervening variable, so the use of financial technology needs to be placed within the framework of managerial skills and adequate financial understanding.

The theoretical contribution of this research lies in developing a business sustainability model that integrates financial literacy, management skills, and digital capital access in the digital economy. It strengthens the Resource-Based View by showing that financial literacy and management skills build business resilience, while expanding the dynamic capability perspective by positioning digital capital access as an external resource that must be managed adaptively. Thus, business sustainability results from the interaction of financial understanding, business management, and digital financing utilization. Practically, MSME actors should not only increase access to digital financing but also strengthen managerial competence to use obtained capital effectively.

The practical consequence of these findings is the need for an integrated MSME development program that combines financial literacy training, management assistance, and access to digital financing. Financial literacy should cover financial recording, cash flow management, financing source selection, and digital credit risk evaluation, while management assistance should be strengthened because management skills are the most dominant factor. The government, financial institutions, fintech providers, and MSME companion institutions should sustainably integrate these programs so that digital capital access supports productivity and business growth rather than consumptive or risky financing behavior.

The study has several limitations. Its cross-sectional design only reflects conditions at one point in time and cannot capture long-term changes in MSME behavior. Purposive sampling limits the generalizability of the findings, while questionnaire-based self-assessment may introduce subjective bias. In addition, the model includes only three independent variables, although business sustainability may also be influenced by innovation, entrepreneurial orientation, digital literacy, policy support, market conditions, and business networks.

Based on these limitations, further research is recommended using longitudinal design in order to observe changes in the sustainability of MSME businesses over time. The next research can also use a mixed method by adding in-depth interviews to be able to explore the experience of business actors in managing digital capital and facing financing risks. In addition, subsequent researchers can expand the number of respondents and the research area so that the results have a stronger generalization. Additional variables such as digital literacy, entrepreneurial orientation, innovation capability, government support, market orientation, and risk management can also be included in the research model to obtain a more comprehensive explanation of business sustainability in the digital economy. The use of SEM-PLS analysis can also be considered if the study wants to test the mediating or moderation relationship between variables in a more complex way.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results, financial literacy, management skills, and digital capital access have a positive and significant effect on business sustainability in the digital economy. Financial literacy supports financial management, business recording, budget planning, and risk control, while management skills are the most dominant factor through planning, organizing, controlling, evaluating, and adjusting business strategies. Digital capital access supports sustainability through digital financing, fintech services, and flexible capital opportunities. Simultaneously, MSME sustainability depends not only on access to capital but also on financial literacy and managerial capacity to utilize resources productively.

MSME actors are advised to improve financial literacy through financial recording, cash flow management, capital planning, and periodic evaluation of digital financing risks. Management skills should also be prioritized because they have the most dominant influence on business sustainability, particularly in business planning, decision-making, operational control, and adaptation to digital market changes. The government, financial institutions, fintech providers, and MSME companion institutions should develop integrated training on financial literacy, business management, and safe and productive use of digital capital. Further research should expand and diversify respondents and include variables such as digital literacy, product innovation, entrepreneurial orientation, government support, and digital marketing capabilities to provide a more comprehensive business sustainability model.

ADVANCED RESEARCH

Further research is recommended to develop a business sustainability model for MSMEs by incorporating other variables such as digital literacy, product innovation, entrepreneurial orientation, government support, and digital marketing capabilities. In addition, the next research can use a mixed method or longitudinal approach to be able to explain changes in the behavior of MSME actors in utilizing financial literacy, management skills, and access to digital capital more deeply from time to time.

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