

The Effects of Access to Capital and Digital Payments on MSME Performance and Sustainability

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ABSTRACT

MSMEs constitute an important component of Indonesia's economy; however, their efforts to strengthen business performance and maintain long-term sustainability remain constrained by several challenges. This study examines the effects of access to capital and digital payments on MSME performance and sustainability, while considering performance as a mediating variable. Data were obtained from 375 MSME owners in Indonesia through a questionnaire employing a 1–6 Likert scale and were subsequently analyzed using PLS-SEM. The findings indicate that both access to capital and digital payments exert positive and significant effects on MSME performance and sustainability, either directly or indirectly through performance. These results are consistent with the RBV, TAM, and IRT, while also offering relevant implications for the formulation and development of policies aimed at supporting MSMEs.

INTRODUCTION

MSMEs are one of the significant contributor Indonesian economy because they contribute to job creation, promote income equality, and boost economic activity among the population (Windusancono, 2021). Amid the rapid expansion of the digital economy and increasingly fierce business competition, MSMEs are required not only to improve their performance but also to maintain sustainability so they can survive and grow sustainably (Baeshen et al., 2021). Nevertheless, MSME development continues to encounter significant challenges, particularly in terms of restricted access to financing, limited utilization of digital technology, and the constantly changing dynamics of the business environment (Marsally et al., 2024).

Access to capital is one factor with the potential to improve the performance and sustainability of MSMEs. Frimpong et al. (2022) state that ease of access to financing can drive improvements in productivity and business performance. In line with this, Widyastuti et al. (2023) explain that access to formal financing supports business capacity building while strengthening the competitiveness of MSME operators. Additionally, advances in financial technology have expanded the use of digital payments as a faster, more efficient, and more practical payment method. Kilay et al. (2022) explain that adopting digital payment systems can enhance operational efficiency and facilitate more effective business management. Similarly, Li et al. (2024) found that the use of financial technology has a positive contribution to improving overall business performance.

Nevertheless, existing studies have largely examined the direct effects of access to capital and digital payments on MSME performance or sustainability. For instance, Frimpong et al. (2022) investigated the role of financial access in enhancing MSME performance, whereas Li et al. (2024) explored the application of financial technology as a means of improving business performance. Meanwhile, Alraja et al. (2022) focused on how innovation and performance contribute to MSME sustainability, without integrating access to capital and digital payments within a single research framework. Therefore, the pathway through which access to capital and digital payments contribute to MSME sustainability through improved performance remains an area that warrants further investigation.

To address this research gap, this study develops an integrated framework in which access to capital and digital payments serve as independent variables, MSME performance functions as the mediating variable, and MSME sustainability represents the dependent variable. Theoretically, the study aims to contribute to the existing body of knowledge on MSME management, digital finance, and sustainability by integrating these four elements into a comprehensive analytical framework. From a practical standpoint, the findings may serve as a reference for government institutions, financial institutions, digital payment service providers, and other MSME stakeholders in designing strategies to expand financing access, promote the effective use of digital payments, and strengthen MSME performance and long-term sustainability.

LITERATURE REVIEW

Resource-Based View (RBV)

Barney (1991) introduced RBV, which argues that an organization's competitive advantage is largely determined by its ability to utilize resources that are valuable, rare, difficult for competitors to replicate, and not readily replaced by alternative resources. Within the MSME context, resources including access to capital, operational capabilities, and business capabilities serve as important foundations for strengthening business performance and sustaining operations over time. When these resources are managed and utilized effectively, MSMEs are more likely to achieve improved performance while maintaining their long-term business sustainability (Barney, 1991).

Technology Acceptance Model (TAM)

TAM proposed by Davis (1987), explains that an individual's acceptance of technology is primarily shaped by two factors: perceived usefulness and perceived ease of use. When users perceive a technology as beneficial and easy to operate, they are more likely to accept and adopt it in their activities. In this study, digital payments are regarded as a technological innovation that can enhance transaction efficiency, streamline business processes, and contribute to the improvement of MSME performance and sustainability (Davis, 1987).

Innovation Resistance Theory (IRT)

IRT proposed by Ram and Sheth (1989), explains that the acceptance of an innovation is influenced not only by the benefits it offers but also by the barriers perceived by users, such as complexity, risk, and habit. The lower the level of resistance to innovation, the greater the likelihood that the technology will be accepted and utilized to its full potential. In this study, IRT is used to explain the acceptance of digital payments by MSME operators.

Access to Capital

Access to capital refers to the ability of business owners to obtain financing to meet operational and business development needs. The availability of financing enables MSMEs to increase their business capacity, expand their market reach, and strengthen their competitiveness, thereby leading to improved performance and business sustainability (Frimpong et al., 2022; Widyastuti et al., 2023).

Digital Payment

Digital payments are cashless payment systems that utilize digital technology to streamline transactions. Their use offers convenience, security, speed, and efficiency in business operations, thereby enhancing the operational effectiveness of MSMEs (Kilay et al., 2022).

MSMEs Performance

The performance of MSMEs reflects a business's ability to achieve its business objectives through effective management of resources, operations, and finances. Good performance is reflected in increased productivity, competitiveness, and sustainable business growth (Alraja et al., 2022).

MSMEs Sustainability

MSME sustainability can be understood as a business's ability to remain viable over the long term by maintaining a balance between economic performance, social responsibility, and environmental stewardship. It further

reflects the capacity of MSMEs to adapt appropriately to changes in the business environment while continuing to generate and preserve economic value over time (Baeshen et al., 2021).

H1: Access to Capital Has a Positive Effect on MSME Performance.

From RBV access to capital can be regarded as a strategic resource that enables MSMEs to strengthen their business capacity, increase productivity, and improve operational efficiency. Abdallah et al. (2024) demonstrated that access to finance positively affects MSME performance. This finding is consistent with Widyastuti et al. (2023), who highlight that improved access to formal credit can facilitate business development. Likewise, Brixiová et al. (2020) indicate that broader financing access gives MSMEs greater opportunities to expand their operations and enhance productivity.

H2: Digital Payments Have a Positive Impact on MSME Performance.

TAM proposes that technologies are more likely to be adopted when users perceive them as useful and easy to use. Consistent with this perspective, Kilay et al. (2022) found that adopting digital payments can improve MSME performance by increasing operational efficiency. Kurniasari et al. (2023) further support this finding by showing that the use of digital payment technologies can strengthen SME performance and competitiveness. In addition, Menne et al. (2022) demonstrated that financial technology contributes to improved business performance by enabling more effective and efficient management practices.

H3: Access to Capital Has a Positive Effect on MSME Sustainability.

The RBV emphasizes that adequate resources are important for organizations seeking to maintain a sustainable competitive advantage over the long term. Baeshen et al. (2021) found that resource availability, particularly access to financing, contributes positively to business sustainability. This finding is further supported by Kurniasari et al. (2025), who explain that access to financing and the use of financial services can strengthen MSME sustainability. Similarly, Wirdiyanti et al. (2023) emphasize that convenient access to financial resources is an important factor in maintaining business continuity and supporting future growth.

H4: Digital Payments Have a Positive Effect on the Sustainability of MSMEs.

The adoption of digital payments can contribute to greater operational efficiency, wider market access, and improved MSME adaptability to technological developments. Kurniasari et al. (2023) found that the adoption of digital technology has a positive effect on MSME sustainability. This result is consistent with Baeshen et al. (2021), who state that the effective utilization of technology and innovation can contribute to business sustainability. Similarly, Satpathy et al. (2025) emphasize that the implementation of digital technologies can strengthen the adaptability and competitiveness of MSMEs amid an increasingly dynamic business environment.

H5: MSME Performance Has a Positive Impact on MSME Sustainability.

According to the RBV, effective resource management can enhance business performance, which subsequently supports competitive advantage and long-term sustainability. Malesios et al. (2021) found that stronger business

performance contributes positively to sustainability by supporting economic, social, and environmental outcomes. This argument is also supported by Alraja et al. (2022), who indicate that strong operational performance and innovation can reinforce MSME sustainability. Similarly, Kurniasari et al. (2023) confirm that improvements in business performance contribute positively to business sustainability.

H6: MSME Performance Mediates the Relationship Between Access to Capital and MSME Sustainability.

Access to capital allows MSMEs to manage their operations more effectively and pursue business expansion, which may lead to improved performance and, ultimately, stronger business sustainability (Frimpong et al., 2022). Frimpong et al. (2022) found that access to finance positively affects MSME performance. This relationship is further supported by Malesios et al. (2021) and Alraja et al. (2022), who demonstrate that enhanced business performance can contribute positively to MSME sustainability.

H7: MSME Performance Mediates the Relationship Between Digital Payments and MSME Sustainability.

The adoption of digital payment systems can improve the operational efficiency and productivity of MSMEs. Kilay et al. (2022) found that the use of digital payments positively influences MSME performance. This finding is consistent with Malesios et al. (2021) and Alraja et al. (2022), who demonstrate that improved business performance contributes positively to MSME sustainability. Furthermore, Kurniasari et al. (2023) emphasize that the adoption of digital technology can enhance business performance while simultaneously supporting the long-term sustainability of MSMEs.

The conceptual framework presented below is developed based on relevant theories and findings from previous studies to provide a structured approach to the research problem:

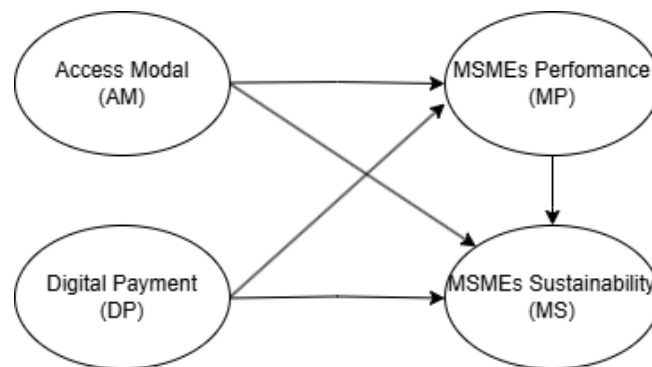


Figure 1. Conceptual Framework

METHODOLOGY

This study uses a quantitative research approach to investigate the effects of access to capital and digital payments on MSME sustainability, with MSME performance serving as the mediating variable. A causal research design was employed to examine both the direct and indirect associations among the variables specified in the proposed research model.

The population consists of MSMEs operating in Indonesia, with respondents selected using random sampling. The sample size was determined in accordance with the guideline proposed by Hair et al. (2021), which recommends a minimum sample equivalent to five times the total number of research indicators. Since this study incorporates 37 indicators, the minimum required sample was 185 respondents. The data collection process ultimately yielded 375 responses, exceeding the minimum requirement and providing a sufficient sample for SEM analysis.

Primary data were gathered through an online questionnaire using a six-point Likert scale, ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). The even-numbered scale was selected to minimize respondents' tendency to choose a neutral response, thereby allowing their answers to more accurately reflect their actual perceptions and experiences. The research instrument was developed using measurement indicators adapted from relevant previous studies. The operationalization of the research variables, including their respective dimensions, indicators, and measurement sources, is presented in Table 1.

Table 1. Variable Operationalization

Variable	Dimension	Indicator	References
Access to Capital	Ease of Access	1. It's easy to apply to a bank or financial institution. 2. The fund disbursement process is usually quick and straightforward.	(Abdallah et al., 2024; Widyastuti et al., 2023)
	Sources of Funding	3. There are more than one financing institution option available. 4. The use of government/NGO programs as an alternative source of capital	(Brixiová et al., 2020)
	Eligibility	5. Completeness of legal documents. 6. Financial history of the business.	(Widyastuti et al., 2023)
	Empowerment and Satisfaction	7. Capital enhances business capacity. 8. Satisfied with the quality of service provided by the financing institution.	(Tirsah & Lubis, 2023; Widyastuti et al., 2023)

<i>Digital Payment</i>	Convenience & Transaction Efficiency	1. Easy to use. 2. Transaction speed. 3. Reduces operational costs	(Kilay et al., 2022; Kurniasari et al., 2025; Menne et al., 2022)
	System Trust & Security	4. Transaction security. 5. Customer data security. 6. Customers trust the platform I use for transactions.	(Khan & Shahid, 2025; Musyaffi et al., 2022)
	User Digital Literacy & Readiness	7. Ability to understand payment technology features. 8. Confidence in using payment technology. 9. Previous experience using digital payment systems..	(Khan & Shahid, 2025; Kurniasari et al., 2023)
MSMEs Perfomance	Financial Performance	1. Sales volume/revenue. 2. Profit volume. 3. Cash flow stability.	(Amini et al., 2021; Frimpong et al., 2022; Li et al., 2024)
	Operational Performance	4. Faster and more organized production/service processes. 5. Operational cost efficiency.	(Kilay et al., 2022; Menne et al., 2022)
	Customer Performance and Innovation	6. Customer satisfaction. 7. Customer loyalty. 8. New product/service innovation.	(Alraja et al., 2022; Jadmiko et al., 2025; Restrepo-Morales et al., 2024)
MSMEs Sustainability	Economy	1. Increasing market share. 2. Increasing sales.	(Baeshen et al., 2021; Kurniasari et

		3. Increasing profits. 4. Product/service development. 5. Diversification (a crisis-resistant business strategy).	al., 2025; Satpathy et al., 2025; Wirdiyanti et al., 2023)
	Environment	6. Use of environmentally friendly raw materials and packaging. 7. Management of business waste. Efficient use of resources. 8. Efficient use of resources. 9. Implementation of environmentally friendly production processes. 10. Efforts to reduce negative environmental impacts.	(Alraja et al., 2022; Baeshen et al., 2021)
	Social	11. Job creation. 12. Employee skill development.	(De et al., 2020; Satpathy et al., 2025)

The collected data were subsequently examined using PLS-SEM with SmartPLS 4.0. The analysis began with an assessment of the outer model, focusing on validity and reliability, and was followed by an evaluation of the inner model. The inner model analysis comprised path coefficients, the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and indirect effects to assess the mediating function of MSME performance.

The structural equations applied in this study are presented as follows.

$$MP = a + \beta_1 AC + \beta_2 DP + \varepsilon_1$$

$$MS = \beta_3 AC + \beta_4 DP + \beta_5 MP + \beta_6 ACMP + \beta_7 DPMP + \varepsilon_2$$

Notes:

AC = Access to Capital

DP = Digital Payments

MP = MSME Performance

MS = MSME Sustainability

β = Path Coefficient

ε = Error

RESEARCH RESULT

Outer Model

Table 2. Outer Model

VARIABLE	DIMENSION	INDICATOR	OUTER		RESULT	Cronbach's alpha	COMPOSITE REALIBILITY		AVE	VIF
			FIRST	SECOND			rho_a	rho_b		
Access to Capital (AM)	Easy of Access	AC1.1	0.948	0.884	Valid	0.932	0.932	0.952	0.831	2.750
		AC1.2	0.950		Valid					
	Funding Sources	AC2.1	0.903	0.922	Valid					3.827
		AC2.3	0.888		Valid					
	Eligibility	AC3.1	0.921	0.923	Valid					3.913
		AC3.2	0.914		Valid					
	Empowering Function	AC4.1	0.914	0.917	Valid					3.666
		AC4.2	0.921		Valid					
Digital Payment (DP)	Convenience	DP1.1	0.840	0.901	Valid	0.855	0.856	0.912	0.775	2.357
		DP1.2	0.866		Valid					
		DP1.3	0.774		Valid					
	Trust	DP2.1	0.868	0.868	Valid					2.014
		DP2.2	0.812		Valid					
		DP2.3	0.802		Valid					
	Literation	DP3.1	0.820	0.871	Valid					2.077
		DP3.2	0.811		Valid					
		DP3.3	0.821		Valid					
MSMEs Performance (MP)	Financial Performance	MP1.1	0.867	0.861	Valid	0.792	0.793	0.879	0.707	1.872
		MP1.2	0.873		Valid					
		MP1.3	0.767		Valid					
	Operasional Performance	MP2.1	0.850	0.854	Valid					1.869
		MP2.2	0.869		Valid					
	Customer Performance	MP3.1	0.801	0.806	Valid					1.475
		MP3.2	0.810		Valid					
		MP3.3	0.733		Valid					
	Economics	MS1.1	0.737	0.923	Valid	0.879	0.885	0.926	0.806	2.894
		MS1.2	0.790		Valid					

MSMEs Sustainability (MS)		MS1.3	0.799		Valid					
		MS1.4	0.780		Valid					
		MS1.5	0.803		Valid					
	Environment	MS2.1	0.707	0.899	Valid					
		MS2.2	0.804		Valid					
		MS2.3	0.799		Valid					
		MS2.4	0.763		Valid					
		MS2.5	0.821		Valid					
	Social	MS3.1	0.878	0.870	Valid					
		MS3.2	0.873		Valid					
										2.534
										2.153

Table 3. HTMT and Fornell Lacker

	<i>Access to Capital</i>		<i>Digital Payment</i>		<i>MSMEs Performance</i>		<i>MSMEs Sustainability</i>	
	HTMT	Fornel	HTMT	Fornel	HTMT	Fornel	HTMT	Fornel
<i>Access to Capital</i>		0.912						
<i>Digital Payment</i>	0.438	0.392		0.880				
<i>MSMEs Performance</i>	0.571	0.491	0.605	0.499		0.841		
<i>MSMEs Sustainability</i>	0.680	0.618	0.546	0.474	0.879	0.736		0.898

The reliability analysis demonstrates that all research constructs, namely Access to Capital (AC), Digital Payments (DP), MSME Performance (MP), and MSME Sustainability (MS), have composite reliability values above 0.7. This indicates that the measurement instruments meet the established reliability requirements. The findings are further confirmed by the Composite Reliability and Cronbach's Alpha values, which consistently exceed the 0.7 threshold, while the AVE values are greater than 0.5. These results indicate that the indicators possess sufficient internal consistency and demonstrate acceptable convergent validity. The discriminant validity assessment also yielded satisfactory results. All HTMT ratios were below 0.90, demonstrating adequate distinction among the constructs. Furthermore, the Fornell-Larcker criterion was satisfied because the square root of the AVE for each construct exceeded its correlations with the other constructs. The VIF values ranged from 1.475 to 3.913, which remain below the threshold of 5. Therefore, the proposed research model does not indicate problematic multicollinearity among the constructs (Hair et al., 2021).

Inner Model

The structural model was evaluated using Q² Predict, SRMR, and NFI to assess its predictive performance and overall model fit (Hair et al., 2019). The results show that the Q² Predict value was 0.333 for MSME performance and 0.428 for MSME sustainability. As both values exceed zero, the model demonstrates moderate predictive relevance. In addition, the SRMR value of 0.050, which is lower than the recommended limit of 0.08, indicates a relatively small degree of residual error. The NFI value of 0.888 also indicates that the proposed model has a good fit with the empirical data.

The coefficient of determination (R^2) was also examined to determine the explanatory capacity of the model. The R^2 value for MSME performance was 0.352, indicating that access to capital and digital payments jointly explain 35.2% of the variance in MSME performance. Meanwhile, the R^2 value for MSME sustainability was 0.633, showing that access to capital, digital payments, and MSME performance collectively explain 63.3% of the variance in MSME sustainability. The hypothesis testing results, coefficient of determination, and direct and indirect effects among the variables are presented in Table 4.

Table 4. Hypothesis Testing

	Hipotesis	Coefisien	T-stat	P-values	F ²	VIF	GC	QE	Result
MSMEs Perfomance									
H1	Access to Capital	0.349	5.810	0.000	0.159	1.181	0.446	0.119	Signifikan***
H2	Digital Payment	0.362	5.429	0.000	0.171	1.181	0.020	0.030	Signifikan***
R ²		0.352 (35,2%)							
R ² adjusted		0.348 (34,8%)							
Q ² predict		0.333 (33,3%)							
MSMEs Sustainability									
H3	Access to Capital	0.323	6.265	0.000	0.208	1.369	0.022	0.106	Signifikan***
H4	Digital Payment	0.079	1.709	0.088	0.012	1.383	0.000	0.000	Signifikan*
H5	MSMEs Perfomance	0.538	8.944	0.000	0.510	1.543	0.012	0.004	Signifikan***
H6	Access to Capital -> MSMEs Perfomance -> MSMEs Sustainability	0.188	5.938	0.000			-0.010	0.130	Signifikan***
H7	Digital Payment -> MSMEs Perfomance -> MSMEs Sustainability	0.195	4.677	0.000			0.223	0.0033	Signifikan***
R ²		0.633 (63,3%)							
R ² adjusted		0.630 (63%)							
Q ² predict		0.428 (42,8%)							

SRMR	0.050
NFI	0.888

The hypothesis testing results reported in Table 4 were subsequently interpreted by referring to the RBV, TAM, and IRT. Furthermore, the findings were examined alongside evidence from previous studies to provide stronger support for the interpretation and discussion of the research results.

DISCUSSION

H1: Access to Capital Has a Positive Effect on MSME Performance

The hypothesis testing results demonstrate that access to capital positively and significantly affects MSME performance, with a path coefficient of 0.349, a t-statistic of 5.810, and a p-value of 0.000. Thus, H1 is accepted. This finding supports the Resource-Based View (RBV), which considers capital an important strategic resource for strengthening MSMEs' operational capabilities and competitive advantage. The result is consistent with Frimpong et al. (2022), who found that access to financing improves SME performance, as well as Widyastuti & Hermanto (2022), who reported that greater ease in obtaining credit can facilitate business development and enhance performance. Therefore, MSMEs should make effective use of available financing to strengthen their business capacity. Adequate capital can support the expansion of operational activities, increase productivity, and ultimately contribute to better overall business performance.

H2: Digital Payments Have a Positive Effect on MSME Performance

The results show that digital payments have a positive and significant effect on MSME performance, as indicated by a path coefficient of 0.362, a t-statistic of 5.429, and a p-value of 0.000. Accordingly, H2 is accepted. This finding is supported by the Technology Acceptance Model (TAM) and Innovation Resistance Theory (IRT), which explain that technologies perceived as useful, easy to use, and involving fewer barriers to adoption are more likely to be accepted and implemented, thereby contributing to improved business performance. The result is also consistent with Kilay et al. (2022) and Li et al. (2024), who found that the adoption of digital payments and financial technology can enhance business efficiency, productivity, and overall performance. For this reason, the incorporation of digital payments into routine business operations should continue to be encouraged. Proper use of digital payment systems can accelerate transactions, increase operational efficiency, improve service quality, and ultimately support stronger MSME performance.

H3: Access to Capital Has a Positive Effect on MSME Sustainability

The findings confirm that access to capital has a positive and significant effect on MSME sustainability, with a path coefficient of 0.323, a t-statistic of 6.265, and a p-value of 0.000. Therefore, H3 is accepted. This result reinforces the Resource-Based View (RBV), which positions capital as a strategic resource that can support the long-term continuity of business operations. The finding is consistent with Baeshen et al. (2021), who emphasize the importance of effective resource management in supporting sustainability, and with Pizzi et al. (2021),

who demonstrate that access to financing can contribute to stronger MSME sustainability. In practical terms, government institutions and financial institutions should continue to expand financing opportunities for SME operators. Wider access to funding can help business owners maintain their operations, pursue further development, and adapt more effectively to changes in the business environment.

H4: Digital Payments Have a Positive Effect on the Sustainability of MSMEs

The results indicate that digital payments have a positive effect on MSME sustainability, as shown by a path coefficient of 0.079, a t-statistic of 1.709, and a p-value of 0.088. Consequently, H4 is accepted at the 10% significance level. This finding is consistent with TAM and IRT, which suggest that the adoption of digital technologies can improve business efficiency and subsequently contribute to the continuity and sustainability of business activities. The result is also supported by Kilay et al. (2022) and Kurniasari et al. (2023), who found that digital technology adoption contributes positively to business sustainability. Therefore, digital payment service providers should continue to improve their services by ensuring greater ease of use, security, and alignment with the needs of SME operators. Such improvements may encourage broader adoption and more effective utilization of digital payments, thereby contributing to the long-term sustainability of MSMEs.

H5: MSME Performance Has a Positive Effect on MSME Sustainability

The analysis reveals that MSME performance has a positive and significant effect on MSME sustainability, as evidenced by a path coefficient of 0.538, a t-statistic of 8.944, and a p-value of 0.000. Thus, H5 is accepted. This result is consistent with the Resource-Based View (RBV), which emphasizes that effective resource management can help businesses develop and maintain sustainable competitive advantages. The finding is further supported by Malesios et al. (2021) and Alraja et al. (2022), who identify stronger business performance as an important factor contributing to MSME sustainability. Accordingly, MSME operators should focus on improving performance through more effective management of operations, financial resources, and service delivery. Strong business performance can enhance the capacity of MSMEs to remain in operation, capitalize on growth opportunities, and maintain their competitive position over time.

H6: Access to Capital Has a Positive Effect on MSME Sustainability through MSME Performance

The findings indicate that MSME performance mediates the relationship between access to capital and MSME sustainability. This indirect effect is reflected in a path coefficient of 0.188, a t-statistic of 5.938, and a p-value of 0.000. Therefore, H6 is accepted. The result provides further support for the Resource-Based View (RBV), which suggests that strategic resources can generate greater value when they are effectively converted into stronger internal capabilities. This finding is also consistent with Kurniasari et al. (2023), who identify improved business performance as an important mechanism through which SME sustainability can be strengthened. Accordingly, MSMEs should direct capital toward productive activities that contribute to performance improvement.

Effective financial management can ensure that the benefits of financing extend beyond immediate operational needs and contribute more substantially to the long-term sustainability of SMEs.

H7: Digital Payments Have a Positive Effect on MSME Sustainability through MSME Performance

The hypothesis testing results demonstrate that MSME performance mediates the relationship between digital payments and MSME sustainability, with a path coefficient of 0.195, a t-statistic of 4.677, and a p-value of 0.000. Hence, H7 is accepted. This finding supports TAM and IRT, which explain that the adoption of digital technology can improve the effectiveness of business activities and, consequently, contribute to business sustainability. The result is also consistent with Kilay et al. (2022) and Kurniasari et al. (2023), who emphasize that financial service digitalization can support MSME sustainability by improving business performance. Therefore, digital payments should not be viewed solely as a means of completing transactions. Their use can be further optimized to improve operational efficiency and business productivity, enabling MSMEs to obtain greater value from digital payment adoption and strengthen their long-term sustainability.

CONCLUSIONS AND RECOMMENDATIONS

The findings indicate that access to capital and digital payments exert positive and significant effects on MSME performance and sustainability, both directly and through indirect relationships. The analysis also confirms that MSME performance serves as a mediating variable linking access to capital with MSME sustainability, as well as digital payments with MSME sustainability. These results imply that the sustainability of MSMEs depends not only on the availability of financing and the adoption of digital payment systems but also on the extent to which these resources contribute to improvements in business performance.

From a practical standpoint, closer cooperation among the government, financial institutions, and digital service providers is needed to widen financing opportunities and encourage greater adoption of digital payment systems among MSMEs. Easier access to capital, combined with the effective utilization of digital payments, can enhance operational efficiency, productivity, and competitiveness, ultimately supporting the long-term sustainability of MSMEs. Furthermore, financial literacy programs and guidance on the use of digital financial services should be strengthened continuously to enable MSME owners to make better use of technology in developing their businesses.

ADVANCED RESEARCH

This study has several limitations that should be considered when interpreting its findings. First, the data were collected during a single period, which limits the extent to which the study can capture changes in MSME development and long-term business sustainability over time. Second, the research focuses on four variables, namely access to capital, digital payments, MSME performance, and MSME sustainability, although sustainability may also be shaped by other factors, including digital financial literacy, innovation,

entrepreneurial orientation, government support, managerial capabilities, and the adoption of other digital technologies. Third, the respondents consisted of MSME operators from Indonesia whose distribution was not evenly represented across the population. Consequently, the findings may not fully reflect the conditions experienced by all MSMEs in Indonesia.

In light of these limitations, future studies could incorporate additional variables that may affect SME performance and sustainability to develop a more comprehensive research model. Future research may also employ a longitudinal design to observe changes over time, broaden the geographical scope of the study, and conduct comparisons across business sectors or different demographic characteristics. These approaches could provide a more detailed understanding of the factors that shape SME performance and sustainability.

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