Financial Digitalization and Literacy in MSMEs Financial Decision-Making: The Mediating Role of Self-Efficacy

Faizal Rizky Yuttama[1], Yusniar Lubis[2], and Nagian Toni[3]
[1]Doctoral student in management program, Faculty of Economics and Business, Universitas Prima Indonesia, Medan, Indonesia
[2] PUI Finance, Universitas Prima Indonesia, Medan, Indonesia
[3]PUI Finance, Universitas Prima Indonesia, Medan, Indonesia

Abstract. This study examines the roles of financial digitalization and financial literacy in shaping financial decision-making among Micro, Small, and Medium Enterprises (MSMEs) in Banyumas Regency, with financial self-efficacy positioned as a mediating variable. Adopting a quantitative research design, the study collected survey data and analyzed them using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results demonstrate that both financial digitalization and financial literacy exert positive and significant effects on financial decision-making. Moreover, these two variables significantly enhance financial self-efficacy, which, in turn, positively influences financial decision-making. The mediation analysis further confirms that financial self-efficacy significantly mediates the effects of financial digitalization and financial literacy on financial decision-making, although the magnitude of the indirect effects remains relatively modest. These findings suggest that effective financial decision-making among MSMEs is not solely determined by access to digital financial tools and financial knowledge, but also by entrepreneurs' confidence in applying such knowledge and resources. This study underscores the importance of integrating technological, cognitive, and psychological dimensions in strengthening MSMEs' financial capability and decision-making performance in the digital era.

Keywords: Digitalization; Literacy; Self-efficacy; Decision-making; MSMEs

1 Introduction

Micro, small, and medium enterprises (MSMEs) play an important role in the regional economic structure because this sector absorbs labor, drives local trade, and supports community production activities. In Banyumas Regency, the number of MSMEs in 2024 reached 91,251 micro enterprises, 22 small enterprises, and 50 medium enterprises. The number of micro enterprises increased compared to 2023, when it stood at 89,477 units,

1 Corresponding author: faizal@uhb.ac.id

indicating that people-based business activities in Banyumas continue to grow and require increasingly better financial management. These data show that MSMEs in Banyumas constitute a major pillar of the local economy, making the quality of their financial decision-making an important issue to examine (Dinas Komunikasi dan Informatika Kabupaten Banyumas, 2025).

Current business phenomena show that MSME actors are facing major changes due to the acceleration of transaction digitalization and financial services. Bank Indonesia reported that by June 2025, the number of QRIS merchants had reached 39.3 million, with 57 million users, and this figure had already achieved 95% of the 2026 user target. This development indicates that digital payments have become part of everyday business practice, including for MSMEs. At the regional level, the Banyumas Regency Government has also reaffirmed its commitment to expanding transaction electronification through the optimization of digital payment channels. This phenomenon suggests that the MSME business environment is becoming increasingly digital, so financial decisions no longer rely solely on manual records or the owner's intuition (Bank Indonesia, 2026).

The expansion of access to digital financial services has not always been followed by adequate user capacity. The 2025 National Survey of Financial Literacy and Inclusion (SNLIK) shows that the national financial inclusion index reached 80.51%, while the financial literacy index only reached 66.46%. This gap indicates that more people are using financial services, but not all of them have sufficient understanding to manage them properly. In the MSME context, this situation may create problems when business owners already use digital payments, mobile banking, or financial applications, yet are not fully able to interpret the financial information generated by these tools to support rational and measurable business decisions (Otoritas Jasa Keuangan, 2025).

Financial decision-making refers to the ability of business owners to choose the best course of action in cash management, financing decisions, pricing, asset purchases, and profit allocation. This ability becomes increasingly important when MSMEs must respond to rapid market changes, cost pressures, and demands for business efficiency. Recent studies show that the quality of financial decisions is strongly influenced by an individual's ability to obtain, understand, and use relevant information. Therefore, financial decision-making in MSMEs cannot be separated from the quality of financial knowledge and the technological support used by business actors (Chhillar et al., 2025).

Financial digitalization provides significant opportunities for MSMEs to improve the quality of their business management. The use of digital payments, financial recording applications, internet banking, and other financial platforms can accelerate the flow of information, facilitate transaction tracking, and provide more accurate data for business owners. Recent studies also indicate that digital transformation in small and medium enterprises is associated with increased innovation, greater adaptability, and more information-based decision-making processes. This means that financial digitalization can become a strategic resource for MSMEs when the technology is genuinely used to support financial evaluation and action (Cherchem et al., 2026; Richmond & Beatriz, 2025).

Financial digitalization does not automatically lead to better financial decisions. Technology merely provides tools, while its effectiveness still depends on the user's ability to understand the functions, benefits, and risks of those services. Therefore, financial literacy becomes an important factor in explaining how MSME actors manage the available financial information. Recent bibliometric reviews show that financial literacy among small business owners and entrepreneurs has remained a strongly developing theme in international publications up to 2025. Other studies also confirm that financial literacy helps business actors understand risks, choose appropriate financing sources, and formulate more rational business decisions (Devender et al., 2026; Keskin et al., 2025).

Knowledge and access to technology do not necessarily translate directly into effective action. MSME actors often face time constraints, operational pressures, market uncertainty, and business risks that require the courage to make decisions. Under such conditions, financial self-efficacy becomes an important variable. Financial self-efficacy refers to an individual's belief in their ability to manage financial problems, evaluate options, and make appropriate decisions. Recent studies indicate that self-efficacy plays an important role in bridging the abilities or resources a person possesses and the actual actions taken in economic and entrepreneurial contexts. In other words, MSME actors who understand finance and utilize technology may still fail to make good decisions if they do not have sufficient confidence to act (Gabrielsson et al., 2026; Jyoti et al., 2025).

Previous studies have extensively discussed digitalization, literacy, and MSMEs, but their focus remains dispersed across different themes. (Chhillar et al., 2025) examined digital financial literacy as a mediator in fintech adoption behavior among MSME managers, so the main focus of their study was technology adoption rather than the quality of financial decision-making. (Tandilino et al., 2025) positioned digital financial inclusion as a mediator between digital financial literacy and government support on MSME performance, so their research outcome focused on performance. Meanwhile, studies on self-efficacy in the financial domain have more often been directed toward financial well-being, stress, or individual financial behavior, rather than MSME financial decision-making at the local level. These findings indicate that the relationship among financial digitalization, financial literacy, financial self-efficacy, and financial decision-making in MSMEs has not been widely tested simultaneously (Chhillar et al., 2025; Jyoti et al., 2025).

Thus, there are research gaps in three aspects. First, many previous studies have positioned business performance, fintech adoption, or financial inclusion as the dependent variable, whereas financial decision-making, as the core activity of MSME financial management, has rarely been made the primary focus. Second, prior studies have more frequently used mediators such as digital financial literacy or digital financial inclusion, while financial self-efficacy has rarely been examined as a mediator in the context of MSME financial decision-making. Third, previous studies have generally been broad or cross-regional in nature, leaving room to test this model in a local context, particularly among MSMEs in Banyumas Regency, which are currently facing accelerated business digitalization (Devender et al., 2026).

Based on the business phenomenon and the identified research gaps, this study is important to conduct in order to analyze the effect of financial digitalization and financial literacy on financial decision-making among MSMEs in Banyumas Regency, with financial self-efficacy positioned as a mediating variable. This study is expected to make a theoretical contribution to the development of MSME financial management literature, particularly in explaining the psychological mechanism that bridges the influence of technology and financial knowledge on business decisions. This study is also expected to provide practical contributions for MSME actors and regional policymakers in designing strategies to strengthen the financial capacity of MSMEs in the digital era (Bank Indonesia, 2026; Otoritas Jasa Keuangan, 2025).

1.1 Literature Review

1.1.1 Resource-Based View (RBV)

The Resource-Based View explains that business advantage is determined by an organization's ability to utilize resources that are valuable, rare, difficult to imitate, and not easily substituted. In the context of MSMEs, these resources are not limited to physical assets, but also include financial knowledge, managerial capability, and the capacity to utilize digital technology. Recent studies emphasize that financial literacy among MSME owners can be viewed as a strategic resource because it helps business owners manage cash flow, assess risk, and make more accurate investment decisions (Is et al., 2025; Padi et al., 2025). RBV is relevant to this study because financial digitalization and financial literacy can be positioned as internal resources that strengthen the quality of business management. Digitalization provides information and transaction infrastructure, while financial literacy strengthens the business owner's capacity to interpret and utilize that information. Research on Indonesian MSMEs also shows that accounting information systems, managerial knowledge capability, and digital platform capability contribute positively to business financial outcomes. Therefore, RBV provides a theoretical foundation suggesting that MSME actors who possess better knowledge and technological resources are more likely to produce higher-quality financial decisions (Padi et al., 2025).

1.1.2 Social Cognitive Theory

Social Cognitive Theory, developed by Bandura (1978) emphasizes that individual behavior is influenced by the interaction among personal factors, environmental factors, and the behavior itself. One of the core concepts of this theory is self-efficacy, which refers to an individual's belief in their ability to perform certain actions and achieve the expected outcomes. In this study, financial self-efficacy is understood as MSME actors' belief that they are capable of managing business finances, evaluating alternative decisions, and resolving financial problems. Recent empirical findings show that self-efficacy functions as a psychological mechanism linking ability or resources to actual behavior. Among micro and small business owners, self-efficacy has been shown to strengthen the intention to continue operating the business and to mediate the effects of skills and funding sources on business sustainability (Alshebami & Al Marri, 2022). This theory explains that it is not enough for a person to merely possess knowledge or access to technology. They must also have the confidence that they can use that knowledge and technology effectively. Therefore, financial self-efficacy is appropriate to be used as a mediating variable in this study.

1.1.3 Technology Acceptance Perspective

The technology acceptance perspective, such as the Technology Acceptance Model, explains that individuals will use technology when they perceive it as useful and easy to use. In the context of MSMEs, financial digitalization becomes more meaningful when business owners perceive that the technology can support transactions, record-keeping, and decision-making. Recent studies show that digitalization in MSMEs can enhance innovation capability, reduce financing constraints, and strengthen supply chain management. Other studies also emphasize that MSME actors need to move beyond passive technology adoption toward productive digital utilization so that financial benefits can truly be realized (Arifin & Anshari, 2026; Cen, T., & Lin, 2025). This perspective supports the argument that financial digitalization can be an important factor in driving behavioral change and improving the quality of financial decision-making among MSMEs.

1.1.4 The Effect of Financial Digitalization on Financial Decision-Making

Financial digitalization helps MSME actors obtain financial information more quickly, more accurately, and in a more well-documented manner. Business owners who use digital payments, mobile banking, bookkeeping applications, and digital accounting systems tend to find it easier to monitor cash flow, daily transactions, and the financial position of their businesses. This condition makes the business evaluation process more systematic and reduces dependence on estimates or intuition alone. Studies on digital accounting systems show that system quality, information quality, and the use of digital systems contribute to improving the quality of sustainable decision-making. Other studies also confirm that digital accounting systems affect cash flow management, profitability, and the effectiveness of financial management (Al-Hattami, 2025; Almgrashi, 2025).

In the MSME context, digitalization also functions as a strategic capability that strengthens business processes. Research on MSMEs in Indonesia shows that digital platform capability and accounting information systems have a positive effect on financial performance, especially when businesses are able to manage digital innovation effectively. Another study on digital transformation in MSMEs found that digital maturity enhances organizational capacity to process information, develop dynamic capabilities, and produce more adaptive business decisions. These findings indicate that financial digitalization is not merely an operational tool, but also a means of strengthening the quality of financial decision-making (Jie et al., 2025).

In addition, the development of fintech further strengthens the argument that financial digitalization can improve decision quality. Empirical studies in the financial sector show that the use of fintech reduces transaction costs, increases efficiency, and improves the quality of credit decisions and other data-based financial decisions. Therefore, when MSMEs adequately adopt financial technology, business owners have greater opportunities to make decisions that are more rational, timely, and information-based (Ahmad et al., 2025; Tong & Yang, 2025).

H1: Financial digitalization has a positive effect on financial decision-making among MSMEs in Banyumas Regency.

1.1.5 The Effect of Financial Literacy on Financial Decision-Making

Financial literacy provides MSME actors with the knowledge base needed to understand important concepts in business management, such as cash flow, debt, interest, risk, profit, investment, and financing. Business owners who possess good financial literacy tend to be better able to assess the consequences of each decision alternative. They are also better prepared to prepare budgets, manage obligations, and determine business fund allocation priorities more rationally. Recent bibliometric reviews show that financial literacy among small business owners and entrepreneurs continues to develop as an important theme because it is directly related to decision quality and business sustainability (Devender et al., 2026).

Recent empirical studies further strengthen this relationship. Research on micro-entrepreneurs shows that financial knowledge improves information-processing ability and leads to more rational financial decision-making. Other studies also indicate that financial literacy plays an important role in promoting business success and enhancing business owners' ability to navigate financial problems. In addition, cross-country studies have found that financial literacy contributes positively to financial development, especially in lower-middle-income countries, which share characteristics similar to the MSME context in developing economies (Ichim & Vid, 2025; Koç et al., 2025).

Financial literacy also strengthens decision quality because financial knowledge helps business actors reduce errors in judgment. MSME owners who understand leverage, risk, and financing structures tend to be more cautious in making debt or investment decisions. Studies on small firms show that financial literacy is related to the financial structure of small businesses and influences how business owners perceive risk and financing. Therefore, the higher the level of financial literacy, the better the quality of financial decision-making (Basha et al., 2025).

H2: Financial literacy has a positive effect on financial decision-making among MSMEs in Banyumas Regency.

1.1.6 The Effect of Financial Digitalization on Financial Self-Efficacy

Financial digitalization can enhance financial self-efficacy because technology makes it easier for MSME actors to access, monitor, and manage business financial information. When business owners perceive that technology makes transactions more practical, reports easier to understand, and financial data easier to control, their sense of capability in managing finances tends to increase. Repeated experience in using digital systems can build the belief that business financial problems can be handled more effectively. Studies on digital accounting systems show that system quality, information quality, and user satisfaction strengthen system utilization, which in turn improves decision quality and the sense of control over financial management (Al-Hattami, 2025; Almgrashi, 2025).

Other studies also show that digital transformation and the use of digital platforms strengthen organizational capabilities and managerial behavior in small businesses. When digital technology becomes part of routine business activities, business owners not only gain new operational tools but also experience increased confidence in using data to make decisions. In the fintech context, recent studies indicate that financial technology and digital capability contribute to better managerial control and a stronger ability to carry out financial processes more effectively (Ahmad et al., 2025; Arifin & Anshari, 2026).

From a psychological perspective, the use of technology perceived as useful and easy to use will strengthen an individual's sense of competence. Although many digitalization studies focus on performance, these findings remain relevant in explaining that MSME actors who become more familiar with financial technology tend to have higher confidence in managing the financial aspects of their businesses. Thus, financial digitalization is expected to increase financial self-efficacy among MSME actors (Jie et al., 2025).

H3: Financial digitalization has a positive effect on financial self-efficacy among MSMEs in Banyumas Regency.

1.1.7 The Effect of Financial Literacy on Financial Self-Efficacy

Financial literacy provides conceptual understanding that makes MSME actors more confident in dealing with business financial problems. Individuals who understand how to prepare budgets, calculate costs, assess risks, and compare financing sources will feel more prepared to take action. Such knowledge reduces uncertainty and increases self-confidence when business actors must make financial choices. Recent literature shows that financial knowledge is closely associated with financial self-confidence, financial resilience, and the ability to act in complex financial situations (González-prida et al., 2025; Ichim & Vid, 2025).

This relationship is also supported by studies that position self-efficacy as a psychological mechanism linking ability and action. Recent research indicates that financial education and resource support can enhance intentions or behavior through self-efficacy. In the entrepreneurial context, self-efficacy explains how knowledge and skills are translated into the confidence to act. Therefore, MSME actors with higher financial literacy are likely to have stronger financial self-efficacy because they feel competent to understand and control their business financial problems (Jyoti et al., 2025; Nkomo et al., 2025).

In addition, bibliometric reviews on financial literacy among small business owners confirm that financial knowledge is not only important for objective outcomes but also plays a role in shaping business owners' orientation, attitudes, and psychological readiness in managing finance. Therefore, financial literacy is expected to have a positive effect on financial self-efficacy among MSME actors (Devender et al., 2026).

H4: Financial literacy has a positive effect on financial self-efficacy among MSMEs in Banyumas Regency.

1.1.8 The Effect of Financial Self-Efficacy on Financial Decision-Making

Financial self-efficacy reflects an individual's belief in their ability to manage finances, solve financial problems, and choose appropriate actions. Among MSME actors, this belief is highly important because business decisions are often made under conditions of uncertainty, limited information, and operational pressure. Business owners with high financial self-efficacy tend to be more willing to evaluate alternatives, consider risks, and act in a more directed manner. In contrast, those with low self-confidence are more likely to hesitate, delay decisions, or rely solely on intuition (Cherchem et al., 2026; Jyoti et al., 2025).

Recent studies on micro and small enterprises show that self-efficacy plays an important role in explaining business continuity intentions, the ability to act, and decision-making in the entrepreneurial context. Other studies also confirm that self-efficacy strengthens the relationship between internal resources and business behavior or outcomes. In the financial context, confidence in one's own ability makes business owners more prepared to use the knowledge and information they possess in order to make relevant and appropriate decisions (Jyoti et al., 2025; Nkomo et al., 2025). Therefore, financial self-efficacy can be viewed as a psychological factor that strengthens the quality of financial decision-making. The higher the confidence of MSME actors in their ability to manage finances, the greater the likelihood that they will make better financial decisions (Nguyen et al., 2025).

H5: Financial self-efficacy has a positive effect on financial decision-making among MSMEs in Banyumas Regency

1.1.9 The Mediating Role of Financial Self-Efficacy in the Effect of Financial Digitalization on Financial Decision-Making

Financial digitalization does not always directly result in better financial decisions. Although technology provides more sophisticated tools and data, its benefits largely depend on the user's psychological readiness. MSME actors need to feel confident that they are capable of using applications, reading information, and interpreting such data to support business decisions. Therefore, financial self-efficacy may serve as a mechanism that explains how financial digitalization is translated into better financial decision-making. Studies on the use of digital systems show that system quality and user experience can enhance the sense of control and decision-making capacity (Al-Hattami, 2025; Almgrashi, 2025).

Findings from research on digital transformation and MSMEs also support this mediation logic. Digital capability often does not directly influence final outcomes, but instead works through changes in internal capabilities, self-confidence, or organizational dynamic capabilities. In the context of small business actors, the successful use of digital technology will increase their sense of competence, and this sense of competence will, in turn, increase the likelihood that business owners make financial decisions in a more directed and confident manner (Jie et al., 2025; Zhang et al., 2025). Thus, financial self-efficacy is expected to mediate the effect of financial digitalization on financial decision-making. The higher the level of financial digitalization, the higher the financial self-efficacy, and ultimately, the better the quality of financial decision-making among MSME actors (Ahmad et al., 2025).

H6: Financial self-efficacy mediates the effect of financial digitalization on financial decision-making among MSMEs in Banyumas Regency.

1.1.10 The Mediating Role of Financial Self-Efficacy in the Effect of Financial Literacy on Financial Decision-Making

Financial literacy provides knowledge, but knowledge is not always directly translated into action. MSME actors may understand financial concepts, but they are not necessarily confident enough to apply them in real decisions. Financial self-efficacy becomes important because this variable explains the psychological process through which knowledge is transformed into action. When business owners understand financial concepts and feel confident in their ability to use them, they are more prepared to make decisions related to cash management, financing, investment, and business expenditures (González-prida et al., 2025; Ichim & Vid, 2025).

Previous studies have shown that self-efficacy often serves as a bridge between education, skills, or resources and actual behavior. In the context of finance and entrepreneurship, increased knowledge can strengthen self-confidence, which in turn drives more effective decisions or actions. Studies on financial literacy among small business owners also indicate that better financial knowledge is associated with greater readiness to manage a business (Devender et al., 2026; Nkomo et al., 2025). Therefore, financial self-efficacy is expected to mediate the effect of financial literacy on financial decision-making. The higher the financial literacy of MSME actors, the higher their financial self-efficacy, and ultimately, the better the financial decisions they make.

H7: Financial self-efficacy mediates the effect of financial literacy on financial decision-making among MSMEs in Banyumas Regency.

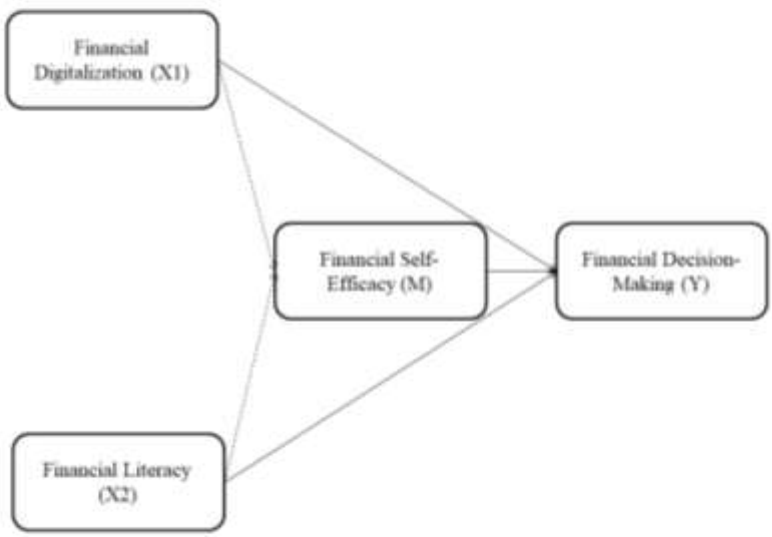

Fig 1. Research Framework

2 Method

This study employed a quantitative approach with a survey method to examine the effects of financial digitalization and financial literacy on financial decision-making, with financial self-efficacy as a mediating variable, among MSMEs in Banyumas Regency. This approach was selected because the research model involves several latent constructs as well as direct and indirect relationships that need to be tested simultaneously. Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS, as this method is appropriate for research aimed at explaining and predicting relationships among variables, is relatively tolerant of non-normally distributed data, and can be applied to models involving mediating constructs (Hair & Alamer, 2022).

The population of this study consisted of MSME actors in Banyumas Regency, Central Java, Indonesia. Banyumas Regency was selected as the research location because of its growing MSME sector and increasing use of digital financial services among local business actors. The study involved 200 MSME actors selected through purposive sampling. Respondents were selected based on the following criteria: they were classified as MSME actors, had operated their business for at least one year, were directly involved in financial decision-making, and had used or at least were familiar with digital financial services such as QRIS, mobile banking, digital wallets, or financial record-keeping applications. The respondents generally represented micro and small enterprises from various business sectors and were involved in managing daily transactions, cash flow, business expenses, and financing decisions. These characteristics made them relevant to the research model, which examines financial digitalization, financial literacy, financial self-efficacy, and financial decision-making. Data were collected during January to February 2026 using structured questionnaires distributed both directly and online. Direct distribution was conducted by approaching eligible MSME actors in Banyumas Regency, while online distribution was carried out through a digital questionnaire link. A five-point Likert scale was used to measure all research indicators. The study used primary data collected through the distribution of a closed-ended questionnaire with a five-point Likert scale, as survey-based primary data are commonly used in PLS-SEM research to operationalize latent constructs. Each variable was measured reflectively through a number of indicators developed from conceptual definitions and previous literature, and the instrument was tested in advance to ensure adequate measurement quality (Hair et al., 2022).

Table 1. Research Instrument

Variable	Code	Indicator
Financial Digitalization (X1)	DK01	Use of digital payments in business transactions
	DK02	Use of applications or digital systems for financial record-keeping
	DK03	Ease of accessing business financial information digitally
	DK04	Speed of completing financial transactions through digital media
	DK05	Intensity of using digital financial services in business activities
Financial Literacy (X2)	LK01	Intensity of using digital financial services in business activities
	LK02	Understanding of business cash flow management
	LK03	Understanding of loans, interest, and business obligations
	LK04	Understanding of business financial risks
	LK05	Understanding in evaluating investment decisions or the use of business funds
Financial Self-Efficacy (M)	FS01	Confidence in managing business finances well
	FS02	Confidence in solving business financial problems
	FS03	Confidence in preparing business financial plans
	FS04	Confidence in controlling business expenditures
	FS05	Confidence in making appropriate financial decisions
Financial Decision-Making (Y)	PK01	Accuracy in making business financial decisions
	PK02	Consideration of risk in financial decisions
	PK03	Use of financial information in decision-making
	PK04	Use of financial information in decision-making
	PK05	Ability to manage decisions related to cash, debt, and financing

Data analysis was carried out in two stages, namely measurement model evaluation (outer model) and structural model evaluation (inner model). The outer model was used to assess instrument quality through convergent validity by examining outer loading and average variance extracted (AVE) values, discriminant validity through HTMT, cross-loading, or the

Fornell-Larcker criterion, and reliability through Cronbach's alpha and composite reliability. The inner model was used to test the strength of the relationships among variables by examining path coefficients, R^2, and Q^2, while hypothesis testing was conducted through a bootstrapping procedure, since PLS-SEM uses a nonparametric approach to test the significance of coefficients, including indirect effects in mediation analysis. Thus, this study examined whether financial self-efficacy truly serves as a mechanism that bridges the effects of financial digitalization and financial literacy on MSMEs' financial decision-making (Hair & Alamer, 2022).

3 Results and Discussion

3.1 Results

This study involved micro, small, and medium enterprise (MSME) actors in Banyumas Regency who met the criteria to be selected as respondents. The characteristics of the respondents were described based on the type of business, length of operation, and the use of digital financial services. In general, the majority of respondents were micro and small business owners who had been operating their businesses for more than one year. In terms of technology utilization, most respondents had adopted digital financial services such as QRIS, mobile banking, and digital wallets in their business activities. This indicates that the respondents possess relevant experience related to the financial digitalization variable examined in this study.

3.1.1 Outer Model Analysis

Table 2. Outer Loadings

	Financial Decision Making (Y)	Financial Digitalization (X1)	Financial Literacy (X2)	Self-Efficacy (M)
M.1				0.876
M.2				0.872
M.3				0.870
M.4				0.868
M.5				0.831
X1.1		0.874		
X1.2		0.893		
X1.3		0.916		
X1.4		0.894		
X1.5		0.797		
X2.1			0.825	
X2.2			0.857	
X2.3			0.889	
X2.4			0.886	
X2.5			0.716	
Y.1	0.852			
Y.2	0.873			
Y.3	0.880			
Y.4	0.866			
Y.5	0.801			

Convergent validity was assessed by evaluating the outer loading values of each indicator on its respective latent construct. An indicator is considered to meet convergent validity if it has an outer loading value greater than 0.70 (Hair et al., 2022). Based on the results of data processing using SmartPLS, as presented in Table 2, all indicators in this study exhibit outer loading values exceeding the minimum threshold of 0.70. Therefore, all indicators are considered to have satisfactory convergent validity and are deemed appropriate for further analysis.

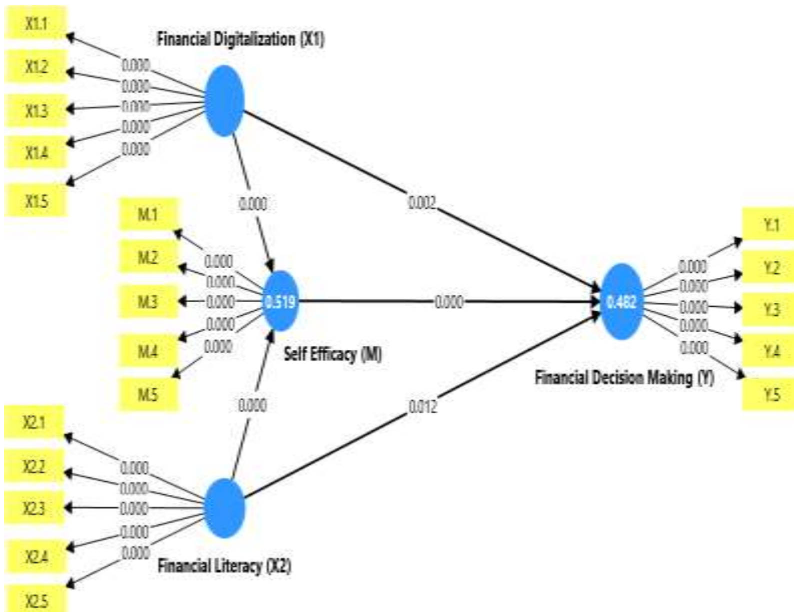

Fig 2. Output Bootstrap

For the financial digitalization variable (X1), the outer loading values range from 0.797 to 0.916, with the highest value observed in the indicator related to ease of access to digital financial information (0.916). This indicates that all indicators are able to reflect the financial digitalization construct very well. For the financial literacy variable (X2), the outer loading values range from 0.716 to 0.889. Although one indicator has a relatively lower value (0.716), it still exceeds the acceptable threshold and is therefore retained in the model. This suggests that all indicators provide an adequate contribution to measuring financial literacy. Furthermore, for the financial self-efficacy variable (M), all indicators exhibit strong outer loading values, ranging from 0.831 to 0.876. These values indicate that the self-efficacy construct is consistently measured by all the indicators employed. Meanwhile, the financial decision-making variable (Y) has outer loading values ranging from 0.801 to 0.880. This demonstrates that the indicators used are capable of representing the financial decision-making construct effectively.

Table 3. Construct Reliability Test Results

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial Decision Making (Y)	0.908	0.913	0.931	0.731
Financial Digitalization (X1)	0.923	0.923	0.943	0.767
Financial Literacy (X2)	0.891	0.898	0.921	0.701
Self-Efficacy (M)	0.915	0.918	0.936	0.746

In addition to assessing convergent validity through outer loadings, the evaluation of the measurement model was also conducted by examining construct reliability and extended convergent validity using Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). A construct is considered reliable if it has Cronbach's Alpha and Composite Reliability values above 0.70, and an AVE value above 0.50 to satisfy convergent validity criteria (Hair et al., 2022). Based on the analysis results presented in Table 3, all variables in this study meet these criteria.

The financial decision-making variable (Y) has a Cronbach's Alpha value of 0.908 and a Composite Reliability value of 0.931, with an AVE of 0.731. This indicates that the financial decision-making construct demonstrates excellent internal consistency and is able to explain the variance of its indicators adequately. The financial digitalization variable (X1) shows a Cronbach's Alpha value of 0.923 and a Composite Reliability value of 0.943, with an AVE of 0.767. These values suggest that the indicators of financial digitalization possess very high reliability and strongly reflect the construct. Furthermore, the financial literacy variable (X2) has a Cronbach's Alpha value of 0.891 and a Composite Reliability value of 0.921, with an AVE of 0.701. These results indicate that financial literacy is measured consistently and demonstrates good convergent validity. For the financial self-efficacy variable (M), the Cronbach's Alpha value is 0.915 and the Composite Reliability value is 0.936, with an AVE of 0.746. This shows that the self-efficacy construct has a very high level of reliability and is able to optimally explain the variance of its indicators.

Table 4. Discriminant Validity Test

	Financial Decision Making (Y)	Financial Digitalization (X1)	Financial Literacy (X2)	Self-Efficacy (M)
Financial Decision Making (Y)				
Financial Digitalization (X1)	0.627			
Financial Literacy (X2)	0.621	0.639		
Self-Efficacy (M)	0.684	0.677	0.715	

Discriminant validity in this study was assessed using the Fornell-Larcker criterion, which involves comparing the square root of the Average Variance Extracted (AVE) with the correlations between constructs. A construct is considered to have good discriminant validity if the square root of its AVE is greater than its correlations with other constructs. Based on the analysis results, the square root of the AVE for each variable financial decision-making (0.855), financial digitalization (0.876), financial literacy (0.837), and financial self-efficacy (0.864) all exceed the correlations with other constructs in the model.

The financial decision-making construct has a square root of AVE greater than its correlations with financial digitalization, financial literacy, and financial self-efficacy. The same pattern is observed for the financial digitalization, financial literacy, and financial self-efficacy constructs, where the square root of AVE for each variable is higher than its correlations with the other constructs. This condition indicates that each latent variable in the study explains the variance of its own indicators better than the variance explained by other constructs.

3.1.2 Inner Model Analysis

The structural model in this study was evaluated by examining the R-square (R^2) values, which measure the ability of the independent variables to explain the dependent variable. The R-square value indicates the proportion of variance in the endogenous construct that can be explained by the exogenous constructs in the research model. Based on the analysis results presented in Table 5, the R-square value for the financial decision-making variable is 0.482, with an adjusted R-square of 0.474. This indicates that 48.2% of the variance in financial decision-making can be explained by the variables of financial digitalization, financial literacy, and financial self-efficacy, while the remaining 51.8% is explained by other factors outside the research model.

Table 5. R-Square Model Evaluation

	R-square	R-square adjusted
Financial Decision Making (Y)	0.482	0.474
Self-Efficacy (M)	0.519	0.514

The financial self-efficacy variable, serving as a mediating variable, has an R-square value of 0.519 and an adjusted R-square of 0.514. This indicates that 51.9% of the variance in self-efficacy can be explained by financial digitalization and financial literacy, while the remaining 48.1% is influenced by other variables not included in the research model. Based on the structural model evaluation criteria, R-square values of 0.482 and 0.519 fall within the moderate category. This suggests that the research model has a reasonably good explanatory power in describing the relationships among variables and is therefore suitable for further hypothesis testing.

Table 6. Goodness of Fit Test

	Saturated model	Estimated model
SRMR	0.073	0.073
d_ULS	1.118	1.118
d_G	0.592	0.592
Chi-square	653.457	653.457
NFI	0.815	0.815

The model's adequacy in this study was evaluated using several Goodness of Fit (GoF) indicators, including the Standardized Root Mean Square Residual (SRMR), d_ULS, d_G, Chi-square, and Normed Fit Index (NFI). Based on the analysis results presented in Table 6, the SRMR value was 0.073 for both the saturated and estimated models. This value is below the cut-off threshold of 0.08, indicating a good fit between the empirical data and the estimated model. The d_ULS value of 1.118 and the d_G value of 0.592 indicate a relatively small difference between the empirical covariance matrix and the model, suggesting an adequate model fit. The Chi-square value of 653.457 reflects the absolute level of misfit; however, in the context of Partial Least Squares Structural Equation Modeling (PLS-SEM), this indicator is not the primary reference for assessing model adequacy. The Normed Fit Index (NFI) value of 0.815 shows a reasonably good model fit, although it does not reach the "very good" category (≥0.90). Nonetheless, in the PLS-SEM approach, an NFI value above 0.80 is still acceptable, particularly in exploratory research and model development.

3.1.3 Hypothesis Testing

Hypothesis testing in this study was conducted by analyzing the path coefficients, t-statistics, and p-values to determine the significance of relationships among variables in the structural model. A relationship is considered significant if the t-statistic is greater than 1.96 and the p-value is less than 0.05. Based on the results presented in Table 7, financial digitalization has a positive and significant effect on financial decision-making, with a path coefficient of 0.249, a t-statistic of 3.139, and a p-value of 0.002. This indicates that an increase in financial digitalization significantly enhances the quality of financial decision-making. Therefore, the hypothesis stating that financial digitalization influences financial decision-making is accepted.

Table 7. Hypothesis Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Financial Digitalization (X1) -> Financial Decision Making (Y)	0.249	0.252	0.079	3.139	0.002
Financial Digitalization (X1) -> Self-Efficacy (M)	0.375	0.374	0.097	3.857	0.000
Financial Literacy (X2) -> Financial Decision Making (Y)	0.191	0.194	0.076	2.521	0.012
Financial Literacy (X2) -> Self-Efficacy (M)	0.435	0.437	0.093	4.695	0.000
Self-Efficacy (M) -> Financial Decision Making (Y)	0.357	0.352	0.086	4.145	0.000

Financial digitalization also has a positive and significant effect on financial self-efficacy, with a path coefficient of 0.375, a t-statistic of 3.857, and a p-value of 0.000. This suggests that the higher the utilization of financial technology, the greater an individual's confidence in managing finances. Hence, this hypothesis is also accepted. The financial literacy variable shows a positive and significant effect on financial decision-making, with a path coefficient of 0.191, a t-statistic of 2.521, and a p-value of 0.012. This result indicates that strong financial literacy contributes meaningfully to an individual's ability to make appropriate financial decisions. Thus, the corresponding hypothesis is accepted.

Financial literacy also has a positive and significant effect on financial self-efficacy, with a path coefficient of 0.435, a t-statistic of 4.695, and a p-value of 0.000. This shows that higher financial knowledge increases an individual's confidence in managing finances, supporting the acceptance of this hypothesis. Finally, financial self-efficacy has a positive and significant effect on financial decision-making, with a path coefficient of 0.357, a t-statistic of 4.145, and a p-value of 0.000. This indicates that the higher an individual's confidence in their financial management abilities, the better the quality of their financial decisions. Therefore, this hypothesis is also accepted.

Table 8. Mediation Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Financial Digitalization (X1) -> Self-Efficacy (M) -> Financial Decision Making (Y)	0.134	0.132	0.049	2.739	0.006
Financial Literacy (X2) -> Self-Efficacy (M) -> Financial Decision Making (Y)	0.155	0.154	0.050	3.121	0.002

As shown in Table 8, the results of the mediation analysis indicate that Self-Efficacy significantly mediates the effect of Financial Digitalization and Financial Literacy on Financial Decision Making. In the mediation pathway of Financial Digitalization → Self-Efficacy → Financial Decision Making, the mediation effect was 0.134 with a T-statistic of 2.739 and $p = 0.006$, indicating that financial digitalization positively enhances Self-Efficacy, which in turn improves individuals' financial decision-making ability. Meanwhile, in the pathway of Financial Literacy → Self-Efficacy → Financial Decision Making, the mediation effect was 0.155 with a T-statistic of 3.121 and $p = 0.002$, suggesting that financial literacy also contributes positively to Self-Efficacy and strengthens the quality of financial decision making. These findings confirm that Self-Efficacy acts as a significant positive mediator, implying that improvements in financial digitalization and literacy not only have direct effects but also enhance individuals' financial decision-making capabilities through increased Self-Efficacy.

$$V = \beta^2{}_{MX} \times \beta^2{}_{YM \cdot X} \tag{1}$$

V = (0.374)2 x (0.352)2
V = 0.139876 x 0.123904 = 0.017
V = (0.437)2 x (0.352)2
V = 0.190969 x 0.123904 = 0.023

Based on the calculation of the mediation value using the formula, it is evident that the mediating effect of Self-Efficacy in the relationship between Financial Digitalization (X1) and Financial Decision Making (Y) is relatively low, with a V value of 0.017. This indicates that, although Self-Efficacy serves as a mediator, its indirect contribution to financial decision-making is not as substantial compared to the direct effect of financial digitalization itself. Similarly, in the pathway from Financial Literacy (X2) → Self-Efficacy → Financial Decision Making (Y), the mediation value V of 0.023 is also considered low, albeit slightly higher than that of X1. These findings suggest that Self-Efficacy positively mediates both relationships, but the resulting mediating effect is weak, implying that the direct influence of Financial Digitalization and Financial Literacy is likely more dominant in shaping individuals' financial decisions.

3.2 Discussion

The results of this study provide empirical evidence on how financial digitalization and financial literacy contribute to enhancing financial decision-making in MSMEs, both directly and indirectly through financial self-efficacy as a mediating variable. These findings reinforce the theoretical frameworks employed in this study, namely the Resource-Based View (RBV) and Social Cognitive Theory, while also offering contextual insights for MSMEs in Banyumas Regency. The study indicates that financial digitalization has a positive effect on financial decision-making. This suggests that the higher the level of financial technology utilization by MSME actors, the better the quality of the financial decisions they make.

These findings are consistent with previous research, which highlights that financial digitalization enables business actors to obtain more accurate, real-time, and well-documented information, thereby improving decision-making quality (Al-Hattami, 2025; Almgrashi, 2025). Moreover, the use of technologies such as QRIS, mobile banking, and financial record-keeping applications assists MSMEs in monitoring cash flow and systematically evaluating business performance. From the Resource-Based View perspective, financial digitalization can be regarded as a strategic resource that enhances organizational capability in managing information (Padi et al., 2025). Therefore, digitalization functions not only as an operational tool but also as an enabler for data-driven decision-making.

The results of this study indicate that financial literacy has a positive and significant effect on financial decision-making. This means that the higher the level of financial understanding among MSME actors, the more rational and appropriate their financial decisions are. These findings are consistent with previous studies, which suggest that financial literacy helps individuals understand fundamental concepts such as risk, return, cash flow, and financing critical elements in business decision-making (Basha et al., 2025; Koç et al., 2025). Financial literacy also enhances the ability to evaluate alternative decisions and minimizes errors in the decision-making process. This supports the argument that financial literacy constitutes an intangible resource within the RBV framework, contributing to the competitive advantage of MSMEs (Is et al., 2025). Business actors with strong financial literacy are generally better able to manage risks and capitalize on business opportunities effectively.

The study also shows that financial digitalization positively influences financial self-efficacy. This indicates that the use of financial technology can enhance the confidence of MSME actors in managing their business finances. These findings align with the Technology Acceptance Perspective, which asserts that technology perceived as easy to use and beneficial increases users' perception of competence (Arifin & Anshari, 2026). Repeated experience with digital systems also strengthens a sense of control over financial activities. Previous research similarly demonstrates that digital system use enhances both a sense of control and confidence in decision-making (Ahmad et al., 2025). In the context of MSMEs, this is particularly important because many business decisions are made under conditions of uncertainty.

The results of this study indicate that financial literacy has a positive effect on financial self-efficacy. This means that the higher an individual's financial knowledge, the greater their confidence in managing business finances. These findings are consistent with Social Cognitive Theory, which emphasizes that self-efficacy is developed through experience, knowledge, and individual understanding(Bandura, 1978). Individuals who comprehend financial concepts feel more prepared and confident in making decisions. Empirical studies also show that financial literacy enhances confidence in handling financial risks and complexities (González-prida et al., 2025; Nkomo et al., 2025). In other words, knowledge forms the foundation for the development of self-confidence.

The study further reveals that financial self-efficacy positively influences financial decision-making. This indicates that confidence plays a crucial role in determining the quality of financial decisions. These findings reinforce Social Cognitive Theory, which posits that individuals with high self-efficacy are more proactive, more willing to make decisions, and better equipped to face risks (Bandura, 1978). In the context of MSMEs, such confidence is particularly important, as decisions are often made under pressure and uncertainty. Previous research also demonstrates that self-efficacy enhances an individual's ability to translate knowledge into concrete actions (Jyoti et al., 2025; Nguyen et al., 2025). Therefore, self-efficacy functions as a catalyst bridging capability and action.

The results of this study indicate that financial self-efficacy mediates the effect of financial digitalization on financial decision-making. This suggests that digitalization does not influence decision-making directly, but rather operates through enhancing the confidence of business actors. These findings are in line with previous research, which shows that the impact of technology often works through psychological mechanisms, such as increased self-confidence and adaptive capacity (Zhang et al., 2025). Effective digitalization enhances a sense of competence, which in turn promotes better decision-making. Financial self-efficacy is also shown to mediate the relationship between financial literacy and financial decision-making. This indicates that financial knowledge alone does not automatically result in sound decisions without the confidence to apply it. These findings reinforce prior studies highlighting that self-efficacy serves as a crucial mechanism bridging knowledge and behavior (Devender et al., 2026; Nkomo et al., 2025). In other words, financial literacy is more effective when accompanied by self-confidence.

Although financial self-efficacy significantly mediates the effects of financial digitalization and financial literacy on financial decision-making, the magnitude of the mediating effect is relatively small. This finding suggests that financial self-efficacy functions as a complementary psychological mechanism rather than the dominant pathway. From the perspective of Social Cognitive Theory, self-efficacy is important because individuals are more likely to translate knowledge and resources into action when they believe they are capable of performing the required behavior(Bandura, 1978). In the MSME context, financial self-efficacy helps business actors apply financial knowledge and digital financial tools more confidently when making decisions related to cash flow, debt, financing, and business expenditure. This interpretation is consistent with previous studies showing that self-efficacy can bridge the relationship between knowledge, resources, and entrepreneurial or financial behavior (Alshebami & Al Marri, 2022; Jyoti et al., 2025; Nkomo et al., 2025).

The relatively small mediation effect indicates that financial digitalization and financial literacy also influence financial decision-making through more direct mechanisms. Financial digitalization may directly improve decision-making by increasing transaction efficiency, facilitating access to financial information, improving financial record-keeping, and supporting cash-flow monitoring. Previous studies have shown that digital accounting systems and financial technology improve the quality of financial information and support better decision-making processes (Ahmad et al., 2025; Al-Hattami, 2025; Almgrashi, 2025). Similarly, financial literacy may directly enhance decision-making because it provides MSME actors with the cognitive ability to understand cash flow, risk, debt, financing, and investment alternatives. This is supported by prior studies indicating that financial literacy strengthens financial understanding, improves business decision quality, and contributes to firm success (Basha et al., 2025; González-prida et al., 2025; Ichim & Vid, 2025; Koç et al., 2025). Therefore, the relatively small but significant mediation effect should not be interpreted as a weak role of financial self-efficacy. Instead, it shows that MSME financial decision-making is shaped by the interaction of three dimensions: technological resources, financial knowledge, and psychological confidence. Practically, MSME development programs should integrate digital financial training, financial literacy education, and confidence-building activities such as mentoring, simulations, and guided practice.

4 Conclusion

This study examines the influence of financial digitalization and financial literacy on financial decision-making among MSMEs, with financial self-efficacy as a mediating variable. The findings provide strong empirical support for the proposed model, demonstrating that all hypothesized relationships are positive and statistically significant. First, financial digitalization is found to significantly enhance financial decision-making, indicating that the adoption of digital financial tools contributes to more structured and informed decisions. Second, financial literacy also plays a significant role in improving decision-making, confirming that knowledge remains a fundamental component in financial management. However, the relatively moderate effect sizes suggest that both factors do not operate in isolation.

This study highlights the critical role of financial self-efficacy. The results show that both financial digitalization and financial literacy significantly increase financial self-efficacy, which in turn exerts a strong influence on financial decision-making. The mediation analysis further reveals that financial self-efficacy partially mediates these relationships, indicating that digitalization and literacy affect decision-making both directly and indirectly through psychological mechanisms. These findings lead to several important conclusions. Theoretically, this study extends the Resource-Based View by demonstrating that organizational and individual resources such as technology and knowledge do not automatically translate into better outcomes without the presence of internal psychological capabilities. By integrating Social Cognitive Theory, this study provides a more comprehensive explanation of how financial decision-making is shaped by the interaction between resources and self-belief. From a practical perspective, the results suggest that efforts to improve MSME performance should not focus solely on increasing access to digital financial tools or enhancing financial literacy. Instead, equal attention should be given to strengthening financial self-efficacy through experiential learning, training, and continuous engagement with financial practices. Policymakers and practitioners are therefore encouraged to design integrated programs that combine digital adoption, financial education, and confidence-building interventions.

Despite its contributions, this study is limited by its cross-sectional design and its focus on a specific regional context, which may restrict generalizability. Future research is recommended to employ longitudinal approaches, expand the scope across different regions or countries, and incorporate additional variables such as risk perception or environmental uncertainty to further enrich the model. This study demonstrates that improving financial decision-making among MSMEs requires not only access to digital tools and financial knowledge but also the confidence to utilize them effectively. Financial self-efficacy emerges as a key mechanism that bridges this gap, offering valuable insights for both theory and practice.

References

Ahmad, F., Fu, J., Ahmad, I., & Alsuhaibany, Y. M. (2025). Financing the future : The role of fintech , leadership , and financial competencies in driving sustainable firm performance. *Acta Psychologica*, *260*(May), 105449. https://doi.org/10.1016/j.actpsy.2025.105449

Al-Hattami, H. M. (2025). The Impact of Digital Accounting Systems on Financial Performance in the Banking Sector: *International Journal of Intelligent Information Technologies*, *21*(1). https://doi.org/https://doi.org/10.4018/IJIIT.377599

Almgrashi, A. (2025). The Influence of the Digital Accounting System on the Quality of Sustainable Decision-Making. *Journal of Risk and Financial Management*, *18*(11).

Alshebami, A. S., & Al Marri, S. H. (2022). The Impact of Financial Literacy on Entrepreneurial Intention: The Mediating Role of Saving Behavior. *Frontiers in Psychology*, *13*(June), 1–10. https://doi.org/10.3389/fpsyg.2022.911605

Arifin, A. H., & Anshari, A. (2026). Digital Accounting and Financial Performance of MSMEs in Indonesia : The Mediating Role of Digital Innovation. *International Journal of Financial Studies*, *14*(3), 1–18.

Bandura, A. (1978). Self-efficacy: Toward a unifying theory of behavioral change. *Advances in Behaviour Research and Therapy*, *1*(4), 139–161. https://doi.org/10.1016/0146-6402(78)90002-4

Bank Indonesia. (2026). *Cara Membuat QRIS All Payment untuk Usaha*. Departemen Komunikasi. https://www.bi.go.id/id/publikasi/ruang-media/cerita-bi/Pages/cara-membuat-qris.aspx?

Basha, S. A., Bennasr, H., & Goaied, M. (2025). Culture , financial literacy , and leverage of small firms. *Research in International Business and Finance*, *75*, 102759. https://doi.org/10.1016/j.ribaf.2025.102759

Cen, T., & Lin, S. (2025). Digital Transformation and Corporate Innovation in SMEs. *Systems*, *13*(7), 1–18.

Cherchem, N., Clark, D., & Wales, W. (2026). The path to SME global performance : Entrepreneurial self-efficacy , perceived institutional support , and international entrepreneurial orientation. *Journal of World Business*, *61*(4), 101726. https://doi.org/10.1016/j.jwb.2026.101726
Chhillar, N., Sharma, K., & Arora, S. (2025). Acta Psychologica Exploring the role of digital financial literacy and personal financial behavior in shaping financial stress and well-being in the digital age. *Acta Psychologica*, *259*(April), 105308. https://doi.org/10.1016/j.actpsy.2025.105308
Devender, K., Kafila, Goli, G., & Shravan, M. (2026). Exploring financial literacy among small business owners and entrepreneurs: trends and insights from 1993 to 2025. *SN Business & Economics*, *6*(3), 86. https://doi.org/10.1007/s43546-025-01039-8
Dinas Komunikasi dan Informatika Kabupaten Banyumas. (2025). *Data dan Informasi Kabupaten Banyumas 2025*.
Gabrielsson, P., Galkina, T., Chabowski, B. R., & Gabrielsson, M. (2026). Improvisation in internationalization decision-making : The critical role of entrepreneurs in SMEs. *Journal of World Business*, *61*(3), 101721. https://doi.org/10.1016/j.jwb.2026.101721
González-prida, V., Pariona-amaya, D., Sánchez-soto, J. M., Barzola-inga, S. L., Aguado-riveros, U., Moreno-menéndez, F. M., & Villar-aranda, M. D. (2025). Exploring the Effects of Financial Knowledge on Better Decision-Making in SMEs. *Administrative Sciences*, *15*(1), 1–25. https://doi.org/https://doi.org/10.3390/admsci15010024
Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research : Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(May), 1–16.
Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
Ichim, S., & Vid, A. (2025). The critical role of financial literacy in enhancing firm success. *Borsa Istanbul Review*, *25*(S2), 156–166. https://doi.org/10.1016/j.bir.2025.10.014
Is, R., Kv, S., & Hungund, S. (2025). MSME / SME Financial Literacy : A Systematic Literature Review and Bibliometric Analysis. *Journal of the Knowledge Economy*, *16*, 14378–14405. https://doi.org/10.1007/s13132-024-02472-0
Jie, H., Mow, L., & Lou, Y. (2025). Digital maturity , dynamic capabilities and innovation performance in high-tech SMEs. *International Review of Economics and Finance*, *99*(February), 103971. https://doi.org/10.1016/j.iref.2025.103971
Jyoti, J., Dash, G., Rani, A., Kour, S., & Khaled, L. (2025). Technology , Market , and Complexity Self-efficacy and women sustainable entrepreneurship in an emerging economy : Role of bricolage and attitude in the era of open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *11*(3), 100572. https://doi.org/10.1016/j.joitmc.2025.100572
Keskin, H., Esen, E., & Kürs, A. (2025). Digital financial literacy and savings behavior : A comprehensive cross-country analysis of FinTech adoption patterns and economic outcomes across 12 nations. *Borsa Istanbul Review*, *25*(September), 59–72. https://doi.org/10.1016/j.bir.2025.09.004
Koç, A., Kilic, Y., Fatih, M., Dibooglu, S., & Cevik, E. I. (2025). The impact of financial literacy on financial development : A cross-country analysis. *Borsa Istanbul Review*, *25*(S2), 177–191. https://doi.org/10.1016/j.bir.2025.10.017
Nguyen, M., Nguyen, C., & Van, N. N. (2025). The impact of financial decisions and manager characteristics to firm ’ s financial performance in SMEs : Bibliometric and systematic analysis. *Social Sciences & Humanities Open*, *12*(February), 101899. https://doi.org/10.1016/j.ssaho.2025.101899
Nkomo, E., Mahlobo, T., & Adekiya, A. (2025). Effect of financial education, social capital, and governmental support and mediating role of self-efficacy on students’

entrepreneurial intentions: using the AMO-based framework approach. *Entrepreneurship Education*. https://doi.org/https://doi.org/10.1007/s41959-025-00167-4

Otoritas Jasa Keuangan. (2025). *Siaran Pers Bersama: Indeks Literasi dan Inklusi Keuangan Masyarakat Meningkat, OJK dan BPS Umumkan Hasil Survei Nasional Literasi Dan Inklusi Keuangan (SNLIK) Tahun 2025*. https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/OJK-dan-BPS-Umumkan-Hasil-Survei-Nasional-Literasi-Dan-Inklusi-Keuangan-SNLIK-Tahun-2025.aspx

Padi, A., Musah, A., Blay, M. W., & Okyere, D. O. (2025). Small and Medium Scale Enterprise (SME) Owner financial literacy , entrepreneurial competencies and financial performance : the role of corporate governance. *Future Business Journal*, *11*(160). https://doi.org/https://doi.org/10.1186/s43093-025-00585-9

Richmond, L., & Beatriz, A. (2025). Digital literacy , digital accessibility , human capital , and entrepreneurial resilience : a case for dynamic business ecosystems. *Journal of Innovation & Knowledge*, *10*(April). https://doi.org/10.1016/j.jik.2025.100709

Tandilino, C., Pontoh, G. T., & Darmawati, D. (2025). Digital Financial Inclusion as a Mediator of Digital Financial Literacy and Government Support in MSME Performance. *International Journal of Financial Studies*, *13*(4), 1–21.

Tong, X., & Yang, W. (2025). Empirical analysis of the impact of financial technology on the profitability of listed banks. *International Review of Economics and Finance*, *98*, 103788. https://doi.org/10.1016/j.iref.2024.103788

Zhang, C., Bai, T., Jingzi, A., & Shijin, S. (2025). Digital platforms , internal digitalization , and internationalization of SMES. *Long Range Planning*, *58*(6), 102588. https://doi.org/10.1016/j.lrp.2025.102588