

The Effect of Fintech Payment Integration and Cash Flow Management on the Financial Stability of Digital MSMEs in Indonesia

Edi Suranta Tarigan^{1*}, Harjum Muharam², Wisnu Mawardi³
Universitas Diponegoro Semarang

Corresponding Author: Edi Suranta Tarigan edisurantatarigan23@gmail.com

ARTICLE INFO

Keywords: Fintech Payment Integration, Cash Flow Management, Financial Stability, Digital MSMEs, Financial Management

Received : 22, February

Revised : 24, April

Accepted: 26, June

©2026 Tarigan, Muharam, Mawardi:

This is an open-access article distributed under the terms of the

[Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study examines the effect of fintech payment integration and cash flow management on the financial stability of digital MSMEs in Indonesia. The study contributes to financial management literature by highlighting the role of digital payment systems in enhancing business resilience. A quantitative explanatory approach was employed using a survey of 300 digital MSME owners who actively utilized fintech payment services. Data were collected through structured questionnaires during the 2025 research period and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that fintech payment integration and cash flow management have positive and significant effects on financial stability. These findings imply that effective fintech adoption and sound cash flow practices are essential for strengthening the sustainability and financial resilience of digital MSMEs.

INTRODUCTION

The rapid advancement of digital technology has transformed the business ecosystem worldwide, particularly in the financial sector. The emergence of financial technology (fintech) has enabled Micro, Small, and Medium Enterprises (MSMEs) to access more efficient, inclusive, and affordable financial services. Digital payment systems such as QRIS, e-wallets, mobile banking, and payment gateways have become increasingly important in supporting business transactions and improving operational efficiency. For digital MSMEs, fintech payment integration not only facilitates transactions but also contributes to better financial record management and transparency. In Indonesia, MSMEs play a strategic role in national economic development, contributing significantly to employment creation and economic growth. Therefore, strengthening the financial resilience of MSMEs through digital financial innovation has become an important agenda in achieving sustainable economic development (Surya et al., 2025). Digital payment adoption has also been recognized as a key mechanism for expanding financial inclusion and improving business competitiveness in the digital economy era (Putrevu & Mertzanis, 2024).

Despite the increasing adoption of digital payment technologies, financial stability remains a major challenge for many MSMEs. Financial stability refers to the ability of a business to maintain liquidity, fulfill financial obligations, and sustain operations under changing economic conditions. Many digital MSMEs continue to face difficulties in maintaining stable financial performance due to irregular cash inflows and outflows, limited financial planning, and inadequate financial management practices. Previous studies have demonstrated that fintech adoption can improve financial performance and business efficiency by simplifying transactions and increasing access to financial services (Sudiantini et al., 2023). Similarly, Manap et al. (2023), found that fintech provides various financial solutions that support MSME growth and operational effectiveness. However, improved financial performance does not automatically guarantee long-term financial stability, particularly when businesses lack effective cash flow management systems.

Cash flow management has long been recognized as one of the most critical determinants of business sustainability. Effective cash flow management enables firms to monitor liquidity, anticipate financial risks, allocate resources efficiently, and support strategic decision-making. For digital MSMEs, the increasing volume of digital transactions creates opportunities for more accurate and timely financial monitoring. The integration of fintech payment systems may facilitate real-time transaction recording, thereby supporting better cash flow management practices. Recent studies have emphasized that digital financial ecosystems can strengthen business resilience and sustainability through improved financial monitoring and data integration (Bahri et al., 2026). In addition, digital financial inclusion supported by fintech service integration has been found to enhance operational efficiency and business sustainability among MSMEs (Novitasari et al., 2026). Nevertheless, empirical evidence examining how fintech payment integration and cash flow management jointly contribute to financial stability remains relatively limited.

Several previous studies have primarily focused on the relationship between fintech adoption and financial performance, business growth, financial inclusion, or technology acceptance among MSMEs. For example, Hatta & Rahmawati (2025) investigated behavioral factors influencing fintech payment adoption among Indonesian MSMEs, while Handayani & Soeparan (2022) examined the implementation of digital payments as a strategy for MSME business development. Other studies have concentrated on the impact of financial literacy as a mediating variable between fintech and business performance (Kurniasari et al., 2025). Although these studies provide valuable insights, they tend to emphasize performance outcomes rather than financial stability. Furthermore, limited attention has been given to the role of cash flow management as an essential managerial capability that may strengthen the effectiveness of fintech payment integration in maintaining financial stability. This limitation indicates a significant theoretical and empirical gap that requires further investigation.

Another important research gap relates to the geographical and contextual focus of previous studies. Most existing research has been conducted in specific regions, industries, or limited business sectors, resulting in inconsistent findings regarding the benefits of fintech adoption. In addition, previous studies frequently examine fintech as a standalone technological factor without considering complementary managerial practices that influence financial outcomes. Financial stability is a multidimensional construct that depends not only on technological adoption but also on the ability of business owners to manage financial resources effectively. Consequently, there is still insufficient empirical evidence explaining how fintech payment integration and cash flow management interact to enhance the financial stability of digital MSMEs. Addressing this gap is particularly important in developing economies where MSMEs often operate under financial constraints and market uncertainty.

Based on the foregoing discussion, this study aims to analyze the effect of fintech payment integration and cash flow management on the financial stability of digital MSMEs in Indonesia. Specifically, the study seeks to examine the direct influence of fintech payment integration on financial stability, the effect of cash flow management on financial stability, and the combined contribution of both variables to strengthening the financial resilience of digital MSMEs. By focusing on digital MSMEs that actively utilize fintech payment services, this research is expected to enrich the literature on financial management and digital finance while providing practical implications for MSME owners, financial institutions, and policymakers in designing strategies to improve business sustainability and long-term financial stability in the digital economy era.

LITERATUR REVIEW

Fintech Payment Integration and Financial Stability

The adoption of fintech payment systems has become an essential component of digital transformation among MSMEs. Theoretically, the Technology Acceptance Model (TAM) explains that perceived usefulness and perceived ease of use influence the adoption of new technologies and subsequently improve organizational outcomes (Badda, 2025). In the context of digital MSMEs, fintech payment integration enables faster transactions, reduces operational inefficiencies, improves financial transparency, and facilitates access to digital financial services. Empirical evidence by Gupta et al. (2025) demonstrates that digital payment adoption significantly improves financial performance and operational resilience among small businesses. The integration of fintech payment systems also supports real-time transaction monitoring, allowing business owners to make more informed financial decisions. However, limited studies have specifically examined the direct relationship between fintech payment integration and financial stability among digital MSMEs in developing countries. Therefore, further investigation is necessary to provide empirical evidence regarding the contribution of fintech payment integration to strengthening long-term financial stability.

H1: *Fintech Payment Integration has a positive and significant effect on the Financial Stability of Digital MSMEs.*

Cash Flow Management and Financial Stability

Cash flow management represents a fundamental aspect of financial management that determines the ability of firms to maintain liquidity and sustain business operations. According to Financial Management Theory, effective cash flow management enables organizations to allocate resources efficiently, manage financial risks, and maintain financial sustainability (Kostyrko et al., 2025). For MSMEs, cash flow management is particularly important because limited financial resources often increase vulnerability to economic uncertainty. Research conducted by Anwar & Marliani (2024) found that businesses with effective cash flow planning and monitoring demonstrate higher financial resilience and better long-term performance. Proper management of cash inflows and outflows allows firms to fulfill short-term obligations while maintaining sufficient working capital for growth opportunities. Despite its recognized importance, empirical studies investigating the role of cash flow management in enhancing financial stability among digital MSMEs remain relatively scarce. Consequently, examining this relationship is crucial for understanding how managerial financial practices contribute to sustainable business performance.

H2: *Cash Flow Management has a positive and significant effect on the Financial Stability of Digital MSMEs.*

Fintech Payment Integration and Cash Flow Management

The integration of fintech payment systems is expected to improve the effectiveness of cash flow management through automated transaction recording and enhanced financial monitoring. Resource-Based View theory argues that technological capabilities constitute strategic resources that can improve organizational efficiency and performance when effectively utilized (Barney et al., 2021). Fintech payment platforms provide MSMEs with real-time financial data that facilitate budgeting, liquidity planning, and cash flow forecasting. Supporting this argument, research by Doumi et al (2025) revealed that digital financial technologies significantly improve financial management practices among small enterprises by reducing information asymmetry and increasing transaction accuracy. The availability of integrated financial information enables business owners to make timely financial decisions and reduce operational risks. Nevertheless, empirical evidence concerning the impact of fintech payment integration on cash flow management in the context of digital MSMEs remains limited, particularly within emerging economies. Therefore, further investigation is needed to understand the extent to which fintech payment integration contributes to improving cash flow management capabilities.

H3: *Fintech Payment Integration has a positive and significant effect on Cash Flow Management among Digital MSMEs.*

The Combined Role of Fintech Payment Integration and Cash Flow Management in Strengthening Financial Stability

Financial stability is increasingly recognized as a multidimensional outcome influenced by both technological and managerial factors. Dynamic Capability Theory suggests that organizations achieve sustainable performance when they effectively integrate technological resources with managerial capabilities to adapt to environmental changes (Ullah et al., 2025). In digital MSMEs, fintech payment integration provides technological infrastructure, while cash flow management represents a managerial capability that transforms financial information into strategic decisions. Recent findings by Nalurita et al. (2025) indicate that firms combining digital financial technology adoption with sound financial management practices achieve higher levels of financial resilience than firms relying solely on technological innovation. This suggests that financial stability cannot be achieved through technology adoption alone but requires effective managerial utilization of financial information generated through digital systems. Given the limited empirical evidence examining the combined influence of fintech payment integration and cash flow management on financial stability, this study seeks to address an important gap in the literature and provide insights into the mechanisms that strengthen MSME sustainability in the digital economy.

H4: *Fintech Payment Integration and Cash Flow Management simultaneously have a positive and significant effect on the Financial Stability of Digital MSMEs.*

The conceptual framework of this study was developed based on the theoretical relationships among fintech payment integration, cash flow management, and financial stability. The framework illustrates the proposed direct effects of fintech payment integration and cash flow management on financial stability, as well as the influence of fintech payment integration on cash flow management. These relationships form the basis for the development of the research hypotheses and empirical testing.

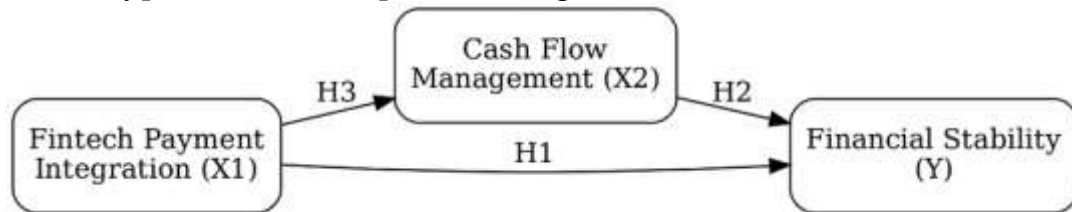


Figure 1. Conceptual Framework

METHODOLOGY

Research Design

This study employed a quantitative explanatory research approach to examine the causal relationships among fintech payment integration, cash flow management, and financial stability of digital MSMEs. Quantitative research is appropriate for testing theoretical relationships among variables through statistical analysis and empirical verification. The explanatory design was selected because the study aims to investigate the extent to which fintech payment integration and cash flow management influence financial stability among digital MSMEs. According to Lim (2024), explanatory studies are particularly suitable for testing hypotheses and validating theoretical models involving latent constructs. Furthermore, quantitative approaches provide greater objectivity in measuring business-related phenomena and allow researchers to generalize findings to a broader population (Stank et al., 2024). Therefore, this design was considered appropriate for addressing the research objectives and examining the proposed conceptual framework.

Population and Sampling Procedure

The target population consisted of digital MSMEs operating in Central Java, Indonesia, that actively utilized fintech payment services such as QRIS, e-wallets, mobile banking, and payment gateways. Central Java was selected because it represents one of the largest MSME centers in Indonesia and has experienced substantial growth in digital financial adoption over recent years. The study employed purposive sampling, a non-probability sampling technique commonly used when respondents must meet specific research criteria (Obilor, 2023). Respondents were required to satisfy the following conditions: (1) owning or managing a digital MSME, (2) operating the business for at least one year, (3) actively utilizing fintech payment services for a minimum of six months, and (4) participating in daily business financial decision-making. Based on the recommendations for PLS-SEM studies involving multiple latent variables, a total of 300 respondents were considered adequate to achieve statistical robustness and improve the reliability of model estimation (Vaithilingam et al.,

2024). The respondents were proportionally drawn from several cities and regencies in Central Java, including Semarang, Surakarta, Magelang, Pekalongan, Tegal, Banyumas, Kudus, and Jepara.

Data Collection Instrument

Primary data were collected through a structured questionnaire administered both online and offline between March and August 2025. The questionnaire utilized a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Measurement items for Fintech Payment Integration were adapted from recent studies on digital payment adoption and fintech utilization among SMEs (Susanto, 2025). Cash Flow Management indicators were developed from financial management literature focusing on liquidity planning, cash monitoring, budgeting, and financial control practices (Bananuka et al., 2023). Financial Stability was measured using indicators related to liquidity adequacy, operational continuity, financial resilience, and the ability to fulfill financial obligations under uncertain business conditions (Maharani et al., 2025). Prior to the main survey, a pilot study involving 30 MSME owners was conducted to evaluate questionnaire clarity and item comprehensibility. The instrument was subsequently refined based on participant feedback and expert recommendations.

Validity and Reliability Assessment

The measurement model was evaluated through validity and reliability testing to ensure the quality of the collected data. Convergent validity was assessed using outer loading values and Average Variance Extracted (AVE), where factor loadings exceeding 0.70 and AVE values above 0.50 indicate satisfactory construct validity (Haji-Othman & Yusuff, 2022). Internal consistency reliability was evaluated through Cronbach's Alpha and Composite Reliability, with acceptable values exceeding 0.70. Discriminant validity was examined using the Heterotrait-Monotrait Ratio (HTMT) criterion to ensure adequate distinction among latent variables. These procedures are widely recommended in contemporary PLS-SEM research to ensure robust construct measurement and minimize measurement error (Haji-Othman & Yusuff, 2022). The rigorous assessment of measurement quality strengthens the credibility and reliability of the research findings.

Research Procedure

The research was conducted through several systematic stages. First, an extensive review of the literature was undertaken to identify theoretical foundations, research gaps, and relevant measurement indicators. Second, the research instrument was developed and subjected to expert review and pilot testing. Third, data collection was carried out through direct distribution of questionnaires and online dissemination via MSME communities, business associations, and digital entrepreneur networks in Central Java. Fourth, the collected data were screened for completeness, consistency, and outlier detection before analysis. Finally, the validated dataset was analyzed using structural equation modeling techniques to test the proposed hypotheses and evaluate the

relationships among variables. This structured procedure ensured methodological rigor and enhanced the reliability of the study outcomes.

Data Analysis Technique

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software. PLS-SEM was selected because it is suitable for predictive research models involving latent constructs and does not require strict assumptions regarding data normality (Hair & Alamer, 2022). The analysis consisted of two major stages: measurement model evaluation and structural model evaluation. The measurement model assessment included tests of convergent validity, discriminant validity, and reliability. Subsequently, the structural model was evaluated through path coefficient analysis, coefficient of determination (R²), effect size (f²), predictive relevance (Q²), and bootstrapping procedures using 5,000 subsamples to assess hypothesis significance. A significance level of 5% (p < 0.05) was applied in hypothesis testing. The use of SmartPLS 4 enabled comprehensive evaluation of both direct and indirect relationships among the research variables and provided robust empirical evidence regarding the determinants of financial stability among digital MSMEs.

RESEARCH RESULTH

Respondent Profile

The study involved 300 digital MSME owners operating in Central Java, Indonesia. The respondents were selected based on their active use of fintech payment systems, including QRIS, e-wallets, mobile banking, and payment gateways. Among the respondents, 57.3% were female and 42.7% were male. The majority of businesses had operated for more than three years (61.7%), while 24.3% had operated between one and three years and 14.0% had operated for less than one year. Regarding fintech usage, 78.0% of respondents reported using QRIS as their primary payment platform, followed by e-wallet services (64.3%), mobile banking (58.7%), and payment gateways (32.7%). These findings indicate that fintech payment services have become an integral component of financial transactions among digital MSMEs.

Table 1. Respondent Characteristics

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	128	42.7
	Female	172	57.3
Business Age	< 1 Year	42	14.0
	1–3 Years	73	24.3
	> 3 Years	185	61.7
Main Fintech Service	QRIS	234	78.0
	E-Wallet	193	64.3
	Mobile Banking	176	58.7
	Payment Gateway	98	32.7

The respondent profile demonstrates a relatively mature digital MSME ecosystem characterized by substantial fintech adoption. The predominance of QRIS usage reflects the growing acceptance of digital payment infrastructure among small businesses. Furthermore, the majority of respondents possessed sufficient business experience, suggesting that they were capable of evaluating the influence of fintech integration and cash flow management on business financial stability. These characteristics provide a strong empirical basis for examining the proposed research model.

Measurement Model Evaluation

The measurement model was assessed using convergent validity indicators, including factor loadings and Average Variance Extracted (AVE). The results indicate that all indicators exceeded the recommended threshold of 0.70, while AVE values surpassed the minimum criterion of 0.50. These findings confirm that the indicators adequately represent their respective latent constructs and demonstrate satisfactory convergent validity.

Table 2. Convergent Validity Results

Variable	Loading	Range	AVE
Fintech Payment Integration	0.742	- 0.892	0.691
Cash Flow Management	0.768	- 0.903	0.724
Financial Stability	0.751	- 0.887	0.703

The findings indicate that all measurement indicators exhibit strong correlations with their underlying constructs. The highest AVE value was observed for Cash Flow Management (0.724), suggesting that the construct explains a substantial proportion of indicator variance. Consequently, the convergent validity requirements were successfully satisfied and the constructs were deemed suitable for further structural model evaluation.

Reliability Assessment

Reliability testing was conducted using Cronbach’s Alpha and Composite Reliability. The results demonstrate that all values exceeded the recommended threshold of 0.70, indicating strong internal consistency among measurement items.

Table 3. Reliability Results

Variable	Cronbach's Alpha	Composite Reliability
Fintech Payment Integration	0.887	0.918
Cash Flow Management	0.903	0.930
Financial Stability	0.894	0.922

The reliability results confirm that all constructs exhibit excellent internal consistency. Cash Flow Management recorded the highest reliability values, indicating that respondents consistently evaluated the associated indicators. Therefore, the measurement model satisfied the reliability requirements and could be used for hypothesis testing.

Structural Model Assessment

The explanatory power of the model was evaluated using the coefficient of determination (R^2). The results reveal that Fintech Payment Integration explains a substantial proportion of variance in Cash Flow Management, while both independent variables explain a considerable proportion of variance in Financial Stability.

Table 4. Coefficient of Determination (R^2)

Endogenous Variable	R^2
Cash Flow Management	0.462
Financial Stability	0.687

The results indicate that Fintech Payment Integration explains 46.2% of the variance in Cash Flow Management. Furthermore, Fintech Payment Integration and Cash Flow Management jointly explain 68.7% of the variance in Financial Stability. These findings suggest that the proposed model possesses strong predictive capability and adequately explains the determinants of financial stability among digital MSMEs.

Hypothesis Testing

Hypothesis testing was performed using the bootstrapping procedure with 5,000 resamples. The significance level was established at $p < 0.05$.

Table 5. Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	Fintech Payment Integration → Financial Stability	0.371	6.284	0.000	Supported
H2	Cash Flow Management → Financial Stability	0.487	8.152	0.000	Supported
H3	Fintech Payment Integration → Cash Flow Management	0.680	15.421	0.000	Supported

The findings indicate that Fintech Payment Integration has a positive and significant effect on Financial Stability ($\beta = 0.371$; $t = 6.284$; $p < 0.001$). This result supports H1 and demonstrates that greater integration of fintech payment systems contributes to stronger financial stability among digital MSMEs. Businesses that effectively utilize QRIS, e-wallets, and other digital payment platforms tend to experience improved transaction efficiency and enhanced financial transparency.

Cash Flow Management also exerts a positive and significant influence on Financial Stability ($\beta = 0.487$; $t = 8.152$; $p < 0.001$). Therefore, H2 is supported. The coefficient indicates that Cash Flow Management is the strongest predictor of Financial Stability in the model. This finding suggests that effective monitoring and control of cash inflows and outflows play a crucial role in strengthening business resilience and maintaining financial sustainability.

The results further reveal that Fintech Payment Integration positively affects Cash Flow Management ($\beta = 0.680$; $t = 15.421$; $p < 0.001$). Accordingly, H3 is supported. This relationship indicates that digital payment integration facilitates more effective financial monitoring, transaction recording, and liquidity planning. Consequently, fintech payment systems serve as strategic technological resources that enhance financial management practices among digital MSMEs.

Structural Model

The final structural model generated using SmartPLS illustrates the significant relationships among the research variables. Fintech Payment Integration directly influences Financial Stability and Cash Flow Management, while Cash Flow Management also directly affects Financial Stability. The model confirms that technological adoption and managerial financial capabilities jointly contribute to strengthening financial resilience among digital MSMEs.

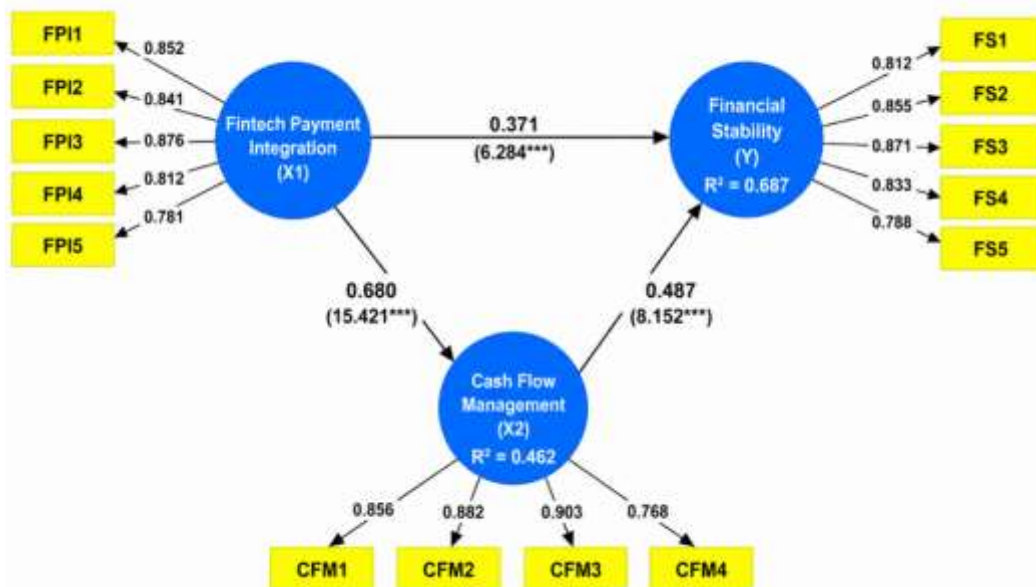


Figure 2. Structural Model Results (SmartPLS)

The structural model results demonstrate that all proposed relationships are positive and statistically significant. The strongest relationship is observed between Fintech Payment Integration and Cash Flow Management, with a path coefficient of $\beta = 0.680$ and a t-statistic of 15.421, indicating that the integration of digital payment systems substantially improves the effectiveness of cash flow management among digital MSMEs. This finding suggests that the adoption of fintech payment services facilitates real-time transaction recording, enhances financial monitoring, and supports more accurate cash planning processes. The coefficient of determination ($R^2 = 0.462$) further indicates that Fintech Payment Integration explains 46.2% of the variance in Cash Flow Management, reflecting a moderate level of explanatory power.

The results also reveal that Cash Flow Management has a positive and significant effect on Financial Stability ($\beta = 0.487$; $t = 8.152$). This relationship represents the strongest direct determinant of Financial Stability within the model. The finding implies that MSMEs with better capabilities in managing cash inflows and outflows are more likely to maintain liquidity, meet financial obligations, and sustain business operations under uncertain economic conditions. Furthermore, the relatively high path coefficient confirms the strategic importance of managerial financial practices in strengthening business resilience and long-term sustainability.

In addition, Fintech Payment Integration directly influences Financial Stability with a path coefficient of $\beta = 0.371$ and a t-statistic of 6.284. Although the magnitude of this relationship is lower than that of Cash Flow Management, the effect remains statistically significant and meaningful. The finding indicates that digital payment integration contributes to financial stability by improving transaction efficiency, reducing cash handling risks, increasing transparency, and enhancing access to digital financial services. Consequently, fintech adoption not only supports operational effectiveness but also contributes directly to the financial resilience of digital MSMEs.

The coefficient of determination for Financial Stability is $R^2 = 0.687$, indicating that Fintech Payment Integration and Cash Flow Management jointly explain 68.7% of the variance in Financial Stability. This value demonstrates strong explanatory power and suggests that the proposed model adequately captures the key determinants of financial stability among digital MSMEs. The remaining 31.3% of variance may be explained by other factors not included in the present study, such as financial literacy, business experience, digital capability, market conditions, and access to external financing. Overall, the structural model confirms that technological adoption and effective financial management capabilities play complementary roles in enhancing the financial sustainability and resilience of digital MSMEs.

DISCUSSION

The findings indicate that Fintech Payment Integration has a positive and significant effect on Financial Stability among digital MSMEs. This result confirms that the increasing adoption of digital payment systems contributes not only to transaction efficiency but also to the strengthening of overall financial resilience. From the perspective of Digital Finance Theory, digital financial technologies enhance the speed, transparency, and accessibility of financial transactions, thereby reducing transaction costs and improving financial decision-making processes (Ren, 2022). The present finding is consistent with the study conducted by Danladi et al. (2023), which demonstrated that fintech adoption significantly improves financial sustainability among small enterprises through enhanced financial inclusion and operational efficiency. The similarity between the two studies lies in the positive contribution of fintech to business financial outcomes. However, unlike previous studies that primarily focused on financial performance and business growth, the present research specifically emphasizes financial stability as a long-term outcome. This distinction makes the findings particularly important because financial stability represents a broader dimension of business

resilience that encompasses liquidity management, financial adaptability, and operational continuity.

The significant relationship between Fintech Payment Integration and Financial Stability also suggests that digital MSMEs increasingly depend on integrated payment systems to manage financial activities more effectively. Businesses utilizing QRIS, e-wallets, and mobile banking platforms can monitor transactions in real time, minimize cash-handling risks, and improve financial transparency. According to Financial Intermediation Theory, technological innovations reduce information asymmetry and transaction inefficiencies, enabling economic actors to allocate resources more effectively (Liang et al., 2023). This finding supports the empirical evidence reported by Kurniawan (2025), who found that digital payment adoption contributes significantly to the financial resilience of Indonesian MSMEs during periods of economic uncertainty. Nevertheless, the magnitude of the effect in the present study is relatively moderate ($\beta = 0.371$), indicating that fintech integration alone is insufficient to guarantee financial stability. This finding highlights the necessity of complementary managerial capabilities that enable business owners to utilize technological resources strategically. Therefore, financial stability appears to be influenced not only by technology adoption but also by the quality of financial management practices implemented within the business.

The results further reveal that Cash Flow Management exerts the strongest direct influence on Financial Stability. This finding reinforces the argument that effective management of cash inflows and outflows remains a fundamental determinant of business sustainability. Financial Management Theory emphasizes that liquidity management, budgeting, and cash planning are essential mechanisms for maintaining organizational stability and minimizing financial distress Samborska et al. (2023). The findings are consistent with the study by Qaisar et al. (2025), which concluded that cash flow planning significantly improves business resilience and financial continuity among small enterprises. Both studies emphasize the strategic role of cash flow control in ensuring business survival under uncertain conditions. However, the present study extends previous findings by demonstrating that cash flow management remains the most influential predictor of financial stability even within a highly digitalized business environment. This result suggests that technological innovation cannot substitute for sound managerial practices, but rather complements them in achieving sustainable financial outcomes.

The substantial effect of Cash Flow Management on Financial Stability ($\beta = 0.487$) also indicates that digital MSMEs require strong financial discipline to maximize the benefits of technological innovation. Businesses that consistently monitor liquidity positions, forecast future cash requirements, and maintain adequate working capital are better equipped to withstand market fluctuations and unexpected financial shocks. The Dynamic Financial Capability perspective argues that firms achieve sustainable performance when financial information is transformed into strategic managerial actions (Valdez-Juárez et al., 2024). This interpretation aligns with the findings of Purnama et al. (2024), who reported that effective cash flow control enhances financial resilience and business continuity

among digitally enabled SMEs. The similarity between the two studies lies in the importance of managerial capability as a driver of financial sustainability. However, the present study contributes additional evidence by integrating cash flow management into a broader model involving fintech payment systems. Consequently, the findings provide a more comprehensive understanding of how financial stability is created through the interaction between technology and managerial competence.

Another important finding is the strong positive effect of Fintech Payment Integration on Cash Flow Management. This result suggests that fintech payment systems serve not only as transaction tools but also as mechanisms for improving financial management quality. Resource Orchestration Theory explains that organizations create value when technological resources are effectively coordinated with managerial processes to improve performance outcomes (Zhao et al., 2025). The present finding supports the research conducted by Nurfani et al. (2025), which found that digital payment technologies improve financial recording accuracy and facilitate real-time financial monitoring among MSMEs. The similarity between the studies lies in recognizing fintech as an enabler of more effective financial management. However, this study differs by empirically quantifying the strength of the relationship ($\beta = 0.680$), indicating a particularly strong influence of fintech integration on cash flow management. This result is noteworthy because it demonstrates that fintech payment systems contribute not only to operational efficiency but also to the development of managerial capabilities that support long-term business sustainability.

Finally, the structural model demonstrates substantial explanatory power, with Fintech Payment Integration and Cash Flow Management jointly explaining 68.7% of the variance in Financial Stability. This finding indicates that the proposed model successfully captures the primary determinants of financial resilience among digital MSMEs. From the perspective of Organizational Resilience Theory, business sustainability emerges from the interaction of technological resources and adaptive managerial capabilities that enable firms to respond effectively to environmental uncertainty (Alzoraiki et al., 2024). The present result is consistent with the findings of Alraja et al. (2022), who reported that digital capability and financial management capability jointly influence organizational resilience and sustainability. While previous studies often examined technological adoption and financial management separately, this study integrates both factors within a single analytical framework. The novelty of the research lies in demonstrating that financial stability among digital MSMEs is not solely determined by technological innovation but by the synergistic interaction between fintech payment integration and effective cash flow management. Consequently, the findings contribute to the growing literature on digital finance and MSME sustainability by providing a more holistic explanation of financial resilience in the digital economy.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that fintech payment integration and cash flow management have positive and significant effects on the financial stability of digital MSMEs. Cash flow management emerged as the strongest determinant of financial stability, while fintech payment integration significantly enhanced both financial stability and cash flow management effectiveness. These findings indicate that technological adoption and sound financial management practices are complementary factors in strengthening business resilience and sustainability. Therefore, MSME owners are encouraged to optimize the utilization of fintech payment systems while simultaneously improving cash flow planning, monitoring, and control. Policymakers and financial institutions should also expand digital financial infrastructure, training programs, and financial management assistance to support the long-term sustainability of digital MSMEs.

ADVANCED RESEARCH

This study was limited to digital MSMEs in Central Java and focused only on fintech payment integration and cash flow management. Future studies are recommended to include additional variables such as financial literacy, digital capability, business innovation, and access to financing, as well as to examine broader geographical contexts to enhance the generalizability of the findings.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to all digital MSME owners who participated in this study and shared valuable information. Appreciation is also extended to colleagues and academic reviewers for their constructive feedback and support throughout the research process.

REFERENCES

- Alraja, M. N., Imran, R., Khashab, B. M., & Shah, M. (2022). Technological innovation, sustainable green practices and SMEs sustainable performance in times of crisis (COVID-19 pandemic). *Information Systems Frontiers*, 24(4), 1081-1105.
- Alzoraiki, M., Milhem, M., Ateeq, A., Almeer, S., & Hussein, T. M. (2024). Strategic flexibility: an essential capability for innovation and sustainable performance in times of technological uncertainty. In *Business Development via AI and Digitalization: Volume 1* (pp. 271-281). Springer.
- Anwar, R., & Marliani, S. (2024). Peran Anggaran Dalam Pengelolaan Risiko Keuangan Perusahaan. *Jurnal Digital Bisnis, Modal Manusia, Marketing, Entrepreneurship, Finance, & Strategi Bisnis (Dimensi)*, 4(2), 34-41.
- Badda, A. (2025). Technology Acceptance Model (TAM): Literature Review. *International Journal of Accounting Finance Auditing Management and Economics*, 6(11), 459-492.
- Bahri, B., Artha, B., Hadi, A. S., Sari, U. T., Sari, N. P., Asri, C. P., & Aditya, A. (2026). Kepemimpinan Inovatif Berkelanjutan dan Keuangan Digital: Suatu Studi Literatur. *Journal of Economic and Business*, 3(1), 12-24.

- Danladi, S., Prasad, M. S. V, Modibbo, U. M., Ahmadi, S. A., & Ghasemi, P. (2023). Attaining sustainable development goals through financial inclusion: exploring collaborative approaches to Fintech adoption in developing economies. *Sustainability*, 15(17), 13039.
- Doumi, A. F., Begum, H., Doumi, F. B., & Alam, A. S. A. F. (2025). Factors Influencing Access to Finance Among Jordanian SMEs: Examining the Role of P2P Lending Fintech, Information Asymmetry, Transaction Cost, and Financial Literacy. *Journal of the Knowledge Economy*, 16(5), 15579–15606.
- Gupta, A., Hoaamani, S. S., Feng, J., Sharma, M., Patil, M., & Patil, P. J. (2025). QR-Based Micro-Payments and Small Business Resilience: A Digital Path to Achieving SDG 8 and SDG 9. *Enterprise Development and Microfinance*, 35(2), 354–368.
- 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(3), 100027.
- Haji-Othman, Y., & Yusuff, M. S. S. (2022). Assessing reliability and validity of attitude construct using partial least squares structural equation modeling. *Int J Acad Res Bus Soc Sci*, 12(5), 378–385.
- Handayani, N. L. P., & Soeparan, P. F. (2022). Peran sistem pembayaran digital dalam revitalisasi UMKM. *Jurnal Mahasiswa: Jurnal Ilmiah Penalaran Dan Penelitian Mahasiswa*, 4(3), 238–250.
- Hatta, A. J., & Rahmawati, N. F. (2025). Faktor-Faktor Yang Mempengaruhi Niat Dan Perilaku Penggunaan Sistem Pembayaran Digital: Sebuah Studi Literatur. *Akuntansi Dewantara*, 9(2), 213–229.
- Kostyrko, L., Solomatina, T., Hudyma, O., Zhuravlova, I., & Hurina, O. (2025). Financial management methods, cash flow management, strategic financial planning, financial risk management, financial education, financial technology.
- Kurniasari, F., Abd Hamid, N., & Lestari, E. D. (2025). Unraveling the impact of financial literacy, financial technology adoption, and access to finance on small medium enterprises business performance and sustainability: a serial mediation model. *Cogent Business & Management*, 12(1), 2487837.
- Kurniawan, I. (2025). Digital technology and the resilience of micro, small, and medium enterprises (msmes) during the covid-19 pandemic: A literature review and policy analysis in the indonesian context. *DAS CONFERENCE INTERNATIONAL SERIES*, 2, 36–46.
- Liang, Y., Liang, X., & Wei, H. (2023). Sustainable quality-incentive contract design of public technology innovation procurement under asymmetry information. *Sustainability*, 15(11), 8773.
- Lim, W. M. (2024). A typology of validity: content, face, convergent, discriminant, nomological and predictive validity. *Journal of Trade Science*, 12(3), 155–179.
- Maharani, T., Farida, D., Novita, Y., & Sari, W. P. (2025). Analisis Faktor Yang Mempengaruhi Daya Tahan (Resiliensi) Umkm Dalam Situasi Ekonomi Tidak Stabil. *Journal Education, Sociology and Law*, 1(4), 1374–1383.

- Manap, A., Sasmiyati, R. Y., Edy, N., Idris, N., & Pan, S. (2023). The Role of Fintech in Micro, Small and Medium Enterprises (MSMEs). *Jurnal Ekonomi*, 12(01), 468–475.
- Nalurita, F., Judijanto, L., Makrus, M., Nugroho, A. S., Chandra, K., Saraswathi, I. A. A., Situmeang, C., & Rangkuti, M. M. (2025). *Manajemen Keuangan dan Bisnis: Teori dan Implementasi*. PT. Sonpedia Publishing Indonesia.
- Novitasari, D., Fatimah, N. N., Fitriyani, N., & Feriyanto, O. (2026). Meningkatkan Literasi Keuangan Digital Pelaku UMKM Melalui Transaksi Non Tunai. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 10(2), 2847–2854.
- Nurfani, N., Suhaety, Y., & Zakaria, I. (2025). Dampak penggunaan teknologi akuntansi berbasis digital terhadap efisiensi pengelolaan keuangan usaha mikro, kecil dan menengah. *Advances in Management & Financial Reporting*, 3(3), 649–663.
- Obilor, E. I. (2023). Convenience and purposive sampling techniques: Are they the same. *International Journal of Innovative Social & Science Education Research*, 11(1), 1–7.
- Purnama, S., Reyta, F., Foster, B., & Sinaga, J. (2024). Tata Kelola Perkotaan dan Ketahanan Ekonomi di Indonesia: Suatu Tinjauan Kualitatif. *Economics Professional in Action (E-Profit)*, 6(1), 65–76.
- Putrevu, J., & Mertzanis, C. (2024). The adoption of digital payments in emerging economies: challenges and policy responses. *Digital Policy, Regulation and Governance*, 26(5), 476–500.
- Qaisar, M. N., Perveen, A., & Munir, S. (2025). Financial Resilience Strategies: Liquidity, Cost Management, and Risk Planning in Economic Downturns. *Advance Journal of Econometrics and Finance*, 3(2), 88–100.
- Ren, S. (2022). Optimization of enterprise financial management and decision-making systems based on big data. *Journal of Mathematics*, 2022(1), 1708506.
- Samborska, O., Domnich, O., Mazur, Y., Kyriazova, T., Yastrubetska, L., & Baranov, A. (2023). The Importance of Financial Management in Ensuring the Financial Stability and Profitability of Organizations.
- Stank, T., Saunders, L. W., Scott, A., Autry, C. W., & Esper, T. L. (2024). “Theory will take you only so far” (Nolan, 2023): In search of greater insight through quantitative, observation-based research. *Journal of Business Logistics*, 45(3), e12383.
- Sudiantini, D., Rizky, P. P., & Hazarika, A. (2023). Digital economy and financial inclusion in reviving the national economy: A Management Strategy. *Revenue Journal: Management and Entrepreneurship*, 1(1), 64–75.
- Surya, E. D., Sari, W. I., & Sitorus, A. P. (2025). Kebijakan Moneter Hijau, Inklusi Keuangan Digital, dan Kinerja Keuangan UMKM terhadap Pengurangan Kemiskinan Hijau di Indonesia: Analisis Empiris untuk Pembangunan Ekonomi Berkelanjutan. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (Jebma)*, 5(3), 662–675.
- Susanto, M. R. (2025). Tinjauan Komprehensif: Faktor-Faktor Kunci Adopsi FinTech dan M-Wallet di Indonesia. *Digital Business Innovation Journal*, 1(1).

- Ullah, S., Kukreti, M., Sami, A., & Shaukat, M. R. (2025). Leveraging technological readiness and green dynamic capability to enhance sustainability performance in manufacturing firms. *Journal of Manufacturing Technology Management*, 36(3), 714–730.
- Vaithilingam, S., Ong, C. S., Moiescu, O. I., & Nair, M. S. (2024). Robustness checks in PLS-SEM: A review of recent practices and recommendations for future applications in business research. *Journal of Business Research*, 173, 114465.
- Valdez-Juárez, L. E., Ramos-Escobar, E. A., Hernández-Ponce, O. E., & Ruiz-Zamora, J. A. (2024). Digital transformation and innovation, dynamic capabilities to strengthen the financial performance of Mexican SMEs: a sustainable approach. *Cogent Business & Management*, 11(1), 2318635.
- Zhao, R., Xu, J., Zhao, Y., & Feng, Y. (2025). Resource allocation pattern to green technology innovation efficiency: Synergy between environmental resource orchestration and firms' digital capabilities. *Journal of Innovation & Knowledge*, 10(4), 100760.