P-ISSN: 1978-2853
E-ISSN: 2302-8890

MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: https://ojs.unud.ac.id/index.php/jmbk/index

Vol. 19 No. 1, 2025 (Februari), 1-8

SINTA 2

Impact of Fintech on Financial Performance of MSMES in Bali with Financial Literacy as Moderator

Ica Rika Candraningrat [1)], Vera Intanie Dewi [2)]
Putu Ayu Kezia Dewi [3)]
[1,3] Faculty of Economics and Business, Udayana University
[2] Faculty of Economics, Parahyangan Catholic University
Email: candraningrat@unud.ac.id

DOI : https://doi.org/10.24843/MATRIK:JMBK.2025.v19.i01.p01

ABSTRACT

This study examines the impact of fintech on the financial performance of micro, small, and medium enterprises (MSMEs) in Bali, with financial literacy as a moderating variable. A quantitative approach was employed, utilizing primary data collected through questionnaire distribution. The sampling method used was purposive sampling, with a total of 150 respondents. The findings indicate that fintech has a positive and significant effect on financial performance. Furthermore, financial literacy positively moderates this relationship, strengthening the impact of fintech on financial performance. These results align with the Theory of Planned Behavior and the Theory of Financial Innovation. The higher the financial literacy of MSME owners, the more effectively they utilize fintech to enhance financial performance.

Keyword: Fintech; Financial Performance; Financial Literacy; MSMEs

INTRODUCTION

Financial performance reflects the effectiveness and efficiency of management in utilizing available resources to contribute to the national economy (Kamukama et al., 2017). In the context of micro, small, and medium enterprises (MSMEs), financial performance is a critical area of study due to its implications for fiscal health and business resilience (Orobia et al., 2020). MSMEs serve as the backbone of Indonesia’s economy, contributing 61.97 percent of the Gross Domestic Product (GDP), equivalent to IDR 8,500 trillion, and employing 97 percent of the workforce (BKPM, 2020). However, economic challenges, particularly in the digital era and the Industry 4.0 revolution, continue to test MSME resilience. To maintain competitiveness, MSMEs require strong competencies in data literacy, technological literacy, and financial literacy (Widyakto et al., 2022).

The Covid-19 pandemic has demonstrated the remarkable resilience of MSMEs, despite widespread revenue declines, operational disruptions, and financial difficulties. These challenges highlight the urgent need for enhanced support in human resource management, marketing strategies, financial management, and technology adoption. Strengthening these areas is essential to ensure that MSMEs can sustain their operations and adapt to an increasingly digital economic landscape.

Innovation in the financial sector, particularly financial technology (fintech), plays a crucial role in the development of MSMEs. Fintech enhances financial inclusion and improves efficiency by providing access to various services such as peer-to-peer (P2P) lending, e-wallets, crowdfunding, and personal finance management (Suryanto et al., 2020). According to Financial Innovation Theory (Silber, 1983), fintech adoption can enhance business competitiveness and operational efficiency. Several studies have shown that fintech positively contributes to MSME financial performance by expanding access to financing and improving transaction efficiency (Abbasi et al., 2021; Leong & Sung, 2018). However, without adequate financial knowledge, fintech adoption may increase financial risks, potentially reducing business performance (Almulla & Aljughaiman, 2021; Sudaryanti et al., 2018).

Financial literacy plays a crucial role in strengthening the relationship between fintech adoption and MSME financial performance. This capability enables business owners to manage their finances wisely, mitigate financial risks, and optimize fintech benefits. Financial literacy comprises three key aspects: financial knowledge, financial behavior, and financial attitude, which collectively contribute to the effectiveness of MSME financial management (Sanistasya et al., 2019). According to the Theory of Planned Behavior (Ajzen, 1985), financial decision-making is influenced by attitudes, subjective norms, and perceived behavioral control. Empirical studies indicate that financial literacy not only enhances the effectiveness of MSME financial management but also facilitates fintech adoption and minimizes the potential negative impacts of financial technology (Mogaji & Nguyen, 2022; Octavina & Rita, 2021).

As a moderating variable, financial literacy strengthens the relationship between fintech adoption and MSME financial performance. A strong understanding of financial concepts enables business owners to utilize fintech features optimally, thereby enhancing financial management efficiency and reducing financial risks. Research by Lema et al. (2021) suggests that financial literacy expands access to fintech services and accelerates the adoption of technological innovations among MSMEs. Thus, financial literacy serves as a key factor in optimizing fintech benefits to improve MSME financial performance.

Bali, as a center of Indonesia’s creative economy and tourism industry, has a diverse and dynamic MSME ecosystem. However, many MSMEs in Bali continue to face challenges in accessing financing and adopting financial technology. Therefore, this study examines the impact of fintech adoption on the financial performance of MSMEs in Bali, with financial literacy as a moderating variable. The findings are expected to provide both theoretical and practical contributions, supporting MSME development and assisting the government and other stakeholders in formulating more effective policies.

METHODS

This study investigates the impact of fintech adoption on financial performance, with financial literacy as a moderating variable. The research was conducted in Bali Province, involving 150 MSMEs selected through purposive sampling. A quantitative approach was employed, utilizing primary data collected via structured questionnaires. Partial Least Squares-Structural Equation Modeling (PLS-SEM) was applied for hypothesis testing and data analysis.

The research framework comprises fintech adoption as the independent variable, financial performance as the dependent variable, and financial literacy as the moderating variable. It is hypothesized that financial literacy strengthens the relationship between fintech adoption and financial performance, implying that MSMEs with higher financial literacy can leverage fintech services more effectively to enhance their financial outcomes.

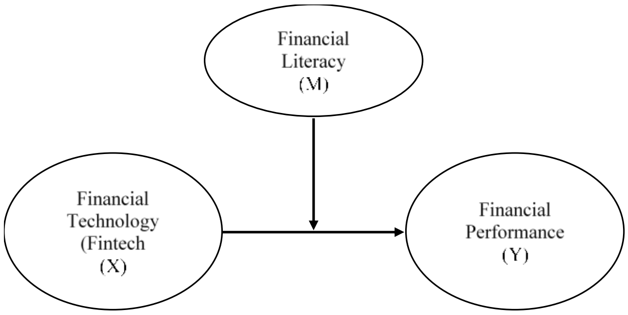

Figure 1. Research Conceptual Framework

The sample selection was based on the following criteria: MSMEs that have been operating in Bali for at least two years, actively using fintech services such as P2P lending, e-wallets, or crowdfunding, and maintaining financial records to assess performance. The indicators used to measure each variable are detailed in Table 1.

Table 1. Research Variable Indicators

Variable	Indicator	Source
Financial performance	Achievements in product sales; Increase in profit or profit; Achievement of revenue targets	Oktavina & Rita (2021)
Fintech	Easy to operate; platform view; Information access; Cost efficiency; Time efficiency; Effectiveness; user experience; Good idea; Perception of individual needs; important person; Influential person; Can be trusted; Personal information; Compensation; Fraud and piracy	Safira et al. (2020)
Financial Literacy	Knowledge of the time value of money; Knowledge of risks about and benefits of investments; Understanding the definition of inflation; Understand the concept of diversification; Active saving; Considering a purchase; Supervise financial affairs; Planning long term goals; Choose a product before making a transaction; and Considering the needs of tomorrow	Safira et al. (2020)

Source: processed data, 2022

RESULT AND DISCUSSION

Table 2 presents the distribution of the research sample, showing that 107 respondents belong to micro businesses, 39 to small businesses, and 4 to medium businesses. The majority of respondents are micro-business owners, accounting for 71 percent of the sample, followed by small businesses at 26 percent and medium businesses at 3 percent.

Table 2. Data Analysis

Intervals	Frequency	Percentage
0 - 2 Billion (Micro)	107	71
> 2 Billion - 15 Billion (Small)	39	26
> 15 Billion - 50 Billion (Medium)	4	3
Amount	60	100

Source: processed data, 2022

Table 3 displays the results of the validity test. All indicators demonstrate their ability to represent the corresponding latent variables, as evidenced by factor loadings exceeding 0.50. These results confirm that all measurement indicators meet the validity requirements.

Table 3. Convergent Validity Test Results

Variable	Indicator	Loading Factor
Fintech (X)	X1	0.672
	X2	0.793
	X3	0.832
	X4	0.640
	X5	0.788
	X6	0.774
	X7	0.859
	X8	0.806
	X9	0.761
	X10	0.712
	X11	0.771
	X12	0.770
	X13	0.658
	X14	0.644
	X15	0.706
Financial Performance (Y)	Y1	0.943
	Y2	0.936
	Y3	0.898
Financial Literacy M)	M1	0.862
	M2	0.776
	M3	0.881
	M4	0.814
	M5	0.826
	M6	0.856
	M7	0.830
	M8	0.869
	M9	0.880
	M10	0.863

Source: processed data, 2022

Table 4 presents a valid model, as indicated by the Average Variance Extracted (AVE) values for each variable exceeding 0.50. The reliability test results in Table 5 confirm that all variables are reliable, as demonstrated by composite reliability and Cronbach's alpha values exceeding 0.50. The composite reliability value for the fintech variable is 0.955, with a Cronbach's alpha of 0.945. The financial performance variable has a composite reliability value of 0.958 and a Cronbach's alpha of 0.916. Meanwhile, the financial literacy variable records a composite reliability of 0.965 and a Cronbach's alpha of 0.876.

Table 4. Average Variance Extracted (AVE) Value

Research variable	AVE
Fintech (X)	0.655
Financial Performance (Y)	0.831
Financial Literacy (M)	0.712

Source: processed data, 2022

Table 5. Reliability Test Results

Variable	Composite Reliability	Cronbach's Alpha
Fintech (X)	0.955	0.945
Financial Performance (Y)	0.958	0.916
Financial Literacy (M)	0.965	0.876

Source: processed data, 2022

Table 6 shows that financial technology positively influences financial performance, with a coefficient of 0.784, a t-statistic of 10.342, and a p-value of 0.000. The p-value, which is below 0.05, confirms the statistical significance of this relationship.

Table 6. Path Coefficients Test Results

Direct Effects	Original Sample (O)	Direct Effects	Original Sample (O)	Direct Effects	Original Sample (O)
Fintech -> Financial Performance	0.784	0.796	0.077	10.342	0.000
Fintech_Financial Literacy -> Financial Performance	0.122	0.107	0.061	2.075	0.038

Source: processed data, 2022

The research findings confirm that fintech positively influences financial performance, supporting the proposed hypothesis. This suggests that SMEs that effectively understand and utilize fintech experience improved financial outcomes. These results align with financial innovation theory, which posits that innovation enhances a company's competitive advantage by improving revenue generation and financial efficiency. This principle applies to SMEs in Bali that have successfully integrated fintech into their business operations. The majority of respondents in this study reported increased income and greater transaction convenience after adopting fintech solutions. Previous studies by (Wulan, 2017), (Leong & Sung, 2018), (Luckandi, 2019), and (Hamidah et al., 2020) also indicate that financial technology contributes positively to SMEs' financial performance. Additionally, access to fintech-based financing enables SMEs to expand their market reach and address funding constraints (Suryanto et al., 2020).

Beyond its direct effect, fintech enhances financial performance through financial literacy as a moderating variable. The analysis results indicate a positive moderation effect, with a coefficient of 0.122, a t-statistic of 2.075, and a p-value of 0.038, confirming that financial literacy strengthens the relationship between fintech adoption and financial performance. This finding supports the hypothesis that financial literacy enhances the positive impact of fintech on financial outcomes. SMEs with higher financial literacy levels can optimize fintech use, mitigate financial risks, and improve financial decision-making, ultimately leading to stronger financial performance.

From the perspective of the Theory of Planned Behavior, financial literacy consists of three key components: attitude, subjective norms, and behavioral control. A positive attitude towards financial management, supportive social norms, and strong behavioral control contribute to SMEs' ability to leverage fintech effectively. SMEs with higher financial literacy levels are better equipped to recognize and adapt to financial changes facilitated by fintech adoption. The ability to utilize fintech optimally depends on SME owners' awareness, knowledge, and skills in financial management. This finding is consistent with (Widyaningsih et al., 2021), who emphasize that financial literacy plays a crucial role in maximizing the benefits of fintech innovations. Furthermore, studies by (Anisah & Crisnata, 2021) and (Octavina & Rita, 2021) reinforce this conclusion, demonstrating that financial literacy amplifies the positive effects of fintech on SMEs' financial performance.

CONCLUSIONS

The findings of this study confirm that fintech adoption positively influences the financial performance of MSMEs, with financial literacy playing a crucial moderating role. MSMEs with higher financial literacy are better able to utilize fintech services effectively, leading to improved financial management, increased revenue, and enhanced business sustainability. These results highlight the importance of financial literacy in maximizing the benefits of fintech adoption among MSMEs.

This research contributes to Financial Innovation Theory by demonstrating that fintech adoption enhances financial performance through increased financial accessibility, efficiency, and competitiveness. The study also supports Planned Behavior Theory, as financial literacy influences MSME owners' attitudes, subjective norms, and behavioral control, leading to more informed financial decision-making and effective fintech utilization. The interaction between fintech and financial literacy strengthens their impact on financial performance, reinforcing the notion that financial knowledge is essential in leveraging technological advancements.

The practical implications of this study emphasize the need to enhance financial literacy among MSMEs to ensure the effective adoption of fintech solutions. MSME owners with strong financial literacy can better manage their finances, mitigate financial risks, and optimize fintech services to improve business performance. Policymakers, financial institutions, and fintech providers should collaborate to implement targeted financial education programs, develop accessible fintech solutions, and facilitate greater financial inclusion for MSMEs. Strengthening financial literacy will enable MSMEs to maximize fintech adoption, contributing to broader economic growth and business resilience.

This study is limited to examining fintech adoption and financial literacy as determinants of financial performance. Future research should consider additional factors such as education level, industry type, innovation capability, business size, ownership structure, and government policies that may also impact MSME financial performance. Expanding the research scope to different regions or industries and incorporating qualitative insights could provide a more comprehensive understanding of the dynamics influencing MSME financial success in the digital era.

REFERENCES

Almulla, D., & Aljughaiman, A. A. (2021). Does financial technology matter? Evidence from an alternative banking system. *Cogent Economics and Finance*, *9*(1), 1–21.

Anisah, N., & Crisnata, H. F. (2021). Analisis Tingkat Literasi Keuangan Pengguna Fintech Payment OVO. *Jurnal Riset Akuntansi Dan Keuangan Dewantara*, *4*(1), 47–60.

Hamidah, N., Prihatni, R., & Ulupui, I. (2020). The Effect Of Financial Literacy, Fintech (Financial Technology) and Intellectual Capital On The Performance Of MSMEs In Depok City, West Java. *Journal of Social Science*, *1*(4), 1–6.

Kamukama, N., Kyomuhangi, D. S., Akisimire, R., & Orobia, L. A. (2017). Competitive advantage: Mediator of managerial competence and financial performance of commercial banks in Uganda. *African Journal of Economic and Management Studies*, *8*(2), 221–234.

Lema, D. G.-P., Palomo, D. R., & Soto, J. D. (2021). Analyzing the roles of CEO's financial literacy and financial constraints on Spanish SMEs technological innovation. *Technology in Society*, *64*, 1–12.

Leong, K., & Sung, A. (2018). FinTech (Financial Technology): What is It and How to Use Technologies to Create Business Value in Fintech Way? *International Journal of Innovation, Management and Technology*, *9*(2), 74–78.

Luckandi, D. (2019). Analisis Transaksi Pembayaran Menggunakan Fintech Pada UMKM di Indonesia: Pendekatan Adaptive Structuration Theory. *Jurnal Informatika Dan Komputer*, *4*(1), 1–10.

Mogaji, E., & Nguyen, N. P. (2022). The dark side of mobile money: Perspectives from an emerging economy. *Technological Forecasting and Social Change*, *185*, 1–21.

Octavina, L. A., & Rita, M. R. (2021). Digitalisasi UMKM, Literasi Keuangan, dan Kinerja Keuangan: Studi pada Masa Pandemi COVID-19. *Journal of Business & Banking*, *11*(1), 73–92.

Orobia, L. A., Nakibuuka, J., Bananuka, J., & Akisimire, R. (2020). Inventory management, managerial competence and financial performance of small businesses. *Journal of Accounting in Emerging Economies*, *10*(3), 379–398.

Sanistasya, P. A., Raharjo, K., & Iqbal, M. (2019). The Effect of Financial Literacy and Financial Inclusion on Small Enterprises Performance in East Kalimantan. *Jurnal Economia*, *15*(1), 48–59.

Sudaryanti, D. S., Sahroni, N., & Kurniawati, A. (2018). Analisis Pengaruh Mobile Banking Terhadap Kinerja Perusahaan Sektor Perbankan yang Tercatat di Bursa Efek Indonesia. *Jurnal Ekonomi Manajemen*, *4*(2), 96–107.

Suryanto, Tahir, R., & Dai, R. M. (2020). Fintech as a Catalyst for Growth of Micro, Small and Medium Enterprises in Indonesia. *Academy of Strategic Management Journal*, *19*(5), 1–12.

Widyakto, A., Liana, Z. W., & Rinawati, T. (2022). The influence of financial literacy, financial attitudes, and lifestyle on financial behavior. *Diponegoro International Journal of Business*, *5*(1), 33–46.

Widyaningsih, D., Siswanto, E., & Zusrony, E. (2021). The Role of Financial Literature Through Digital Financial Innovation on Financial Inclusion (Case Study of MSMEs in Salatiga City). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *5*(4), 1301–1312.

Wulan, V. R. (2017). Financial Technology (fintech) a New Transaction in Future. *Journal of Electrical Engineering and Computer Sciences*, *2*(1), 177–182.