

Digital Financial Literacy, Financial Technology Payments, and MSMEs Financial Performance : Analysis Structural Equation Modeling - PLS

¹ Swandani*

¹ Departement of Accounting, Politeknik Negeri Bali, Indonesia

¹*email: swandani@pnb.ac.id

ABSTRACT

This study aims to analyze the relationship between digital financial literacy and the use of financial technology payments on the financial performance of Micro, Small, and Medium Enterprises (MSMEs). The population of this research includes MSMEs operating in Maros Regency, South Sulawesi Province. The research adopts a quantitative approach employing purposive sampling, where 32 MSME owners were surveyed through structured questionnaires, allowing the researcher to directly observe and communicate with the business owners. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM–PLS) with SmartPLS 4.0. to examine causal relationships among variables. The empirical results reveal that both digital financial literacy and fintech payment adoption have a positive and significant influence on MSME financial performance. Enterprises with higher levels of digital financial literacy are more capable of leveraging fintech payments platforms effectively, resulting in improved efficiency and financial performance. Furthermore, the study demonstrates that the adoption of fintech payments contributes to the improvement of financial performance among MSMEs in Maros Regency, South Sulawesi. Fintech adoption also enhances the quality and timeliness of financial reporting, which aligns with the principles of financial accounting theory. These findings emphasize are expected to provide valuable contributions to MSME development and increase awareness of the importance of digital financial literacy and utilizing fintech payment services in the digital economy era.

Keywords: Digital Financial Literacy; Fintech Payments; MSMEs; Financial Performance.

Submitted: October 11, 2025

Revised: October, 26 2025

Accepted: November 17, 2025

INTRODUCTION

The rapid advancement of digital technology in the last decade has transformed economic systems and financial behavior globally. One major outcome of this transformation is the emergence of Financial Technology (Fintech), which integrates technology into financial services to increase accessibility, efficiency, and transparency (Gomber et al., 2017). In Indonesia, fintech applications such as QRIS, OVO, GoPay, Dana, and ShopeePay have become increasingly popular among MSMEs because they facilitate quick, secure, and cost-efficient transactions (Rani & Desiyanti, 2023).

MSMEs remain a vital component of Indonesia's economy, contributing over 60% of GDP and employing more than 97% of the national workforce (Putra & Lasmi, 2025). However,

challenges persist, including low levels of digital financial literacy, limited access to credit, and a lack of technological readiness. According to Nurchayati, Ariyanti, and Marianingsih (2024), MSMEs with stronger digital capabilities are more likely to integrate fintech services efficiently, which enhances financial performance and competitiveness.

Digital financial literacy encompasses not only the ability to use financial technology but also the understanding of financial concepts necessary for effective decision-making in a digital environment (Putri & Christiana, 2021). MSME owners with strong digital literacy can evaluate fintech applications, manage cash flow efficiently, and maintain accurate financial records. As Zaimovic et al. (2025) emphasize, digital literacy enables small businesses to adapt quickly to technological changes and maintain competitiveness.

Fintech payment systems provide numerous advantages, including automation of financial processes, increased transaction speed, and enhanced data transparency (Gomber et al., 2017; Lubis et al., 2021). When combined with adequate financial literacy, these systems can improve MSME performance by strengthening recordkeeping, minimizing transaction errors, and providing real-time access to financial data (Demetrius & Yusbardini, 2022).

Maros Regency is located along the main route connecting Makassar City with other regencies in South Sulawesi and lies in close proximity to Makassar. This strategic location, coupled with access to Sultan Hasanuddin International Airport within Maros, provides substantial trade potential and its growing MSME sector, which ranges from culinary and craft industries to agriculture-based enterprises. Despite increasing exposure to fintech systems, the adoption rate among MSMEs in Maros Regency remains uneven. Some businesses have embraced QRIS and digital wallets, while others continue to rely on cash-based transactions due to low digital literacy or limited infrastructure (Febriyani, 2024).

Previous studies across Indonesia—such as in Padang, Jakarta, Pontianak, Medan, and Solo have revealed mixed results. Rani and Desiyanti (2023) reported that fintech payments directly improved MSME performance, while Lubis et al. (2021) and Octavina and Rita (2021) found that financial literacy moderates the effect of fintech on financial outcomes. Felix et al. (2022) who found that financial literacy and fintech utilization positively and significantly affect MSME performance, while Iza Balqis et al. (2022) who reported that financial literacy and the

use of QRIS have a significant impact on MSME income growth. However, such relationships remain underexplored in smaller regional economies like Maros Regency.

Most of these studies were conducted in major cities such as Padang, Jakarta, Pontianak, Medan, and Solo. In contrast, Maros Regency remains underexplored. Compared to other regions in South Sulawesi, research on digital financial literacy and fintech payments in Maros Regency is still limited. This condition makes it an interesting case to study in order to examine the relationship between digital financial literacy, the use of fintech payments, and financial performance. Therefore, this study aims to contribute new insights within a different geographical context—specifically a developing region—by comparing national findings with local conditions and providing evidence-based policy recommendations tailored to Maros Regency. Additionally, this research contributes both academically and empirically to local policy formulation to promote digital transformation and sustainable financial growth.

LITERATURE REVIEW

Financial Accounting Theory

According to Scott (2015), financial accounting theory emphasizes that financial reports must convey information that is relevant, reliable, comparable, and understandable to facilitate sound economic decisions. For MSMEs, this theoretical framework provides the foundation for assessing business performance and accountability. In Indonesia, compliance with SAK-EMKM ensures that financial statements are transparent and consistent. The application of financial accounting principles helps MSMEs generate credible reports for both internal and external stakeholders. As highlighted by Garrison, Noreen, and Brewer (2020), technology-supported accounting systems enhance timeliness and reliability in financial reporting.

Digital Financial Literacy

Digital financial literacy refers to an individual's ability to apply financial knowledge within digital contexts such as mobile banking, online payments, and fintech platforms (Putra et al. 2025). It encompasses the understanding of digital risks, awareness of online financial tools, and skills in using technology for budgeting, saving, and investing. Candraningrat et al. (2025) found that digital literacy moderates the relationship between fintech usage and MSME

financial performance, indicating that technological knowledge is a key determinant of business success in digital economies. Zaimovic et al. (2025) also emphasized that entrepreneurs with higher digital literacy demonstrate better adaptability to technological innovations and achieve improved profitability and sustainability.

Fintech Payments

Fintech payment refers to digital financial technology that enables online payment transactions. According to Gomber et al. (2017), fintech payment systems can enhance the efficiency and effectiveness of payment transactions while reducing transaction costs. MSMEs that use fintech payment platforms can improve their financial performance and customer satisfaction due to the convenience and practicality of digital transactions.

MSME Financial Performance

MSMEs are recognized as key drivers of local development, particularly in areas with limited access to capital and formal financial services. However, MSMEs often struggle with technological adaptation. Enhancing their digital literacy and fintech usage can bridge financial inclusion gaps and improve long-term business sustainability (Nurchayati et al., 2024).

Financial performance measures how effectively MSMEs manage resources to achieve profitability, liquidity, and efficiency. According to Putra and Lasmi (2025), financial performance in the digital era is increasingly influenced by the extent of technology adoption and innovation. Incorporating fintech into financial operations can improve these indicators by automating recordkeeping, reducing human error, and providing real-time financial analysis (Febriyani, 2024). As a result, digital transformation strengthens MSME competitiveness and resilience against economic fluctuations.

Theoretical Framework

Based on the theoretical foundations and previous research, this study focuses on the relationship between digital financial literacy and the use of fintech payment systems on the financial performance of MSMEs in Maros Regency. It is assumed that higher levels of digital financial literacy among MSME actors lead to more effective utilization of fintech payment systems, which in turn enhances MSME financial performance. Therefore, the research can be formulated as follows:

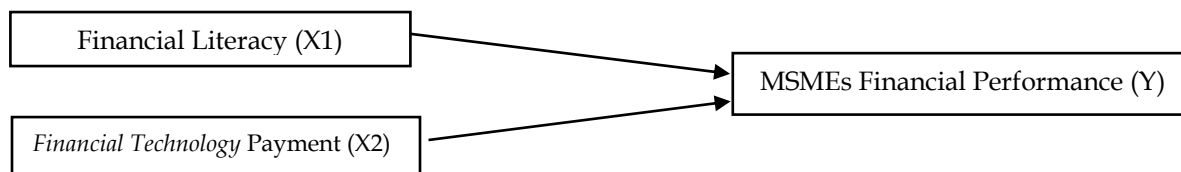


Figure 1. Framework

METHOD

This study employed a quantitative explanatory design. This approach was chosen because it enables the testing of causal relationships among variables and provides statistical validation (Hair et al., 2019). The research population included all registered MSMEs operating in Maros Regency that use at least one digital payment or fintech platform. The number of samples was determined based on the requirements for SEM-PLS analysis, in which the recommended minimum sample size is around 30 respondents (Ghozali, 2015). Questionnaires were distributed directly to MSME owners who met the inclusion criteria, and a total of 32 MSMEs were selected as research samples using purposive sampling based on criteria: active operation for at least two years, use of digital payment applications, and availability of financial performance data. The direct distribution of questionnaires allowed the researcher to ensure data accuracy and facilitate respondent understanding during the data collection process. Data analysis was conducted using SmartPLS 4.0 following Ghozali and Latan (2015). The process included:

1. Measurement Model Evaluation (Outer Model) explains the causal relationships between latent variables—both endogenous and exogenous—and their corresponding indicators or observed variables. The evaluation of the reflective measurement model includes several key tests, which are designed to assess the reliability and validity of the constructs within the model. The analysis included: testing convergent and discriminant validity using factor loadings (> 0.70), Average Variance Extracted (AVE) test (> 0.50), and reliability (Cronbach's Alpha > 0.70).
2. Structural Model Evaluation (Inner Model) aims to identify and examine the relationships between the independent variable (X) and the dependent variable (Y) within the study. The evaluation of the structural model is conducted through several procedures : Coefficient of

Determination (R Square or R^2) Test, Predictive Relevance (Q Square or Q^2) Test, and Hypothesis Testing (t-Test) (p -value < 0.05).

RESULT AND DISCUSSION

RESULT

Descriptive Analysis

The descriptive analysis of this study includes the duration of business operation, the number of employees, and the types of fintech payment platforms used, as follows:

Table 1. Duration of Business Operation

	Frequency	Percent	Valid Percent	Cumulative Percent
<1 Year	3	9.4	9.4	9.4
1-3 Years	5	15.6	15.6	25.0
>3 Years	24	75.0	75.0	100.0
Total	32	100.0	100.0	

Source : SmartPLS, 2025

The table of MSME business duration shows that 3 MSMEs (9.4%) have been operating for less than one year, 5 MSMEs (15.6%) have been operating for 1 to 3 years, and 24 MSMEs (75%) have been operating for more than 3 years. This indicates that the majority of the MSMEs studied have been in operation for over 3 years.

Table 2. Number of Employees

	Frequency	Percent	Valid Percent	Cumulative Percent
1-3 Employee	13	40.6	40.6	40.6
4-9 Employees	14	43.8	43.8	84.4
>10 Employees	5	15.6	15.6	100.0
Total	32	100.0	100.0	

Source : SmartPLS, 2025

The table showing the number of employees in the MSMEs studied indicates that 13 MSMEs, or 40.6% of the total number of MSMEs studied, had 1 to 3 employees; 14 MSMEs, or 43.8% of the total number of MSMEs studied, had 4 to 9 employees; and 5 MSMEs, or 15.6% of

the total number of MSMEs studied, had more than 10 employees. This means that the number of employees most commonly found in the SMEs studied is 4 to 9 employees.

Table 3. Types of Fintech

	Frequency	Percent	Valid Percent	Cumulative Percent
QRIS	13	40.6	40.6	40.6
E-Wallet	6	18.8	18.8	59.4
Mobile Banking	7	21.9	21.9	81.3
Other	6	18.8	18.8	100.0
Total	32	100.0	100.0	

Source : SmartPLS, 2025

The table shows the types of fintech used by MSMEs in the study. QRIS was used by 13 MSMEs, or 40.6% of the total types of fintech, while E -Wallet was used by 6 MSMEs or 18.8% of the total number of fintech, mobile banking was used by 7 MSMEs or 21.9% of the total number of fintech types, and other types of fintech were used by 6 MSMEs or 18.8% of the total number of fintech types. This means that QRIS fintech is the most widely used type of fintech for payments.

Quantitative Analysis

Quantitative analysis in this study consists of instrument validity testing and instrument reliability testing to determine whether all variables meet the reliability requirements so that they can be used for further research.

Tabel 4. Construct Validity Test X1

		X1.1	X1.2	X1.3	X1.4	X1.5	X1
X1.1	Sig. (2-tailed)		.000	.000	.017	.000	.000
X1.2	Sig. (2-tailed)	.000		.001	.001	.001	.000
X1.3	Sig. (2-tailed)	.000	.001		.001	.000	.000
X1.4	Sig. (2-tailed)	.017	.001	.001		.000	.000
X1.5	Sig. (2-tailed)	.000	.001	.000	.000		.000

X1	Sig. (2-tailed)	.000	.000	.000	.000	.000
----	-----------------	------	------	------	------	------

Source : SmartPLS, 2025

Tabel 5. Construct Validity Test X2

		X2.1	X2.2	X2.3	X2.4	X2.5	X2
X2.1	Sig. (2-tailed)		.000	.000	.000	.001	.000
X2.2	Sig. (2-tailed)	.000		.000	.000	.000	.000
X2.3	Sig. (2-tailed)	.000	.000		.000	.002	.000
X2.4	Sig. (2-tailed)	.000	.000	.000		.002	.000
X2.5	Sig. (2-tailed)	.001	.000	.002	.002		.000
X2	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	32	32	32	32	32	32

Source : SmartPLS, 2025

Tabel 6. Construct Validity Test Y

		Y.1	Y.2	Y.3	Y.4	Y
Y.1	Sig. (2-tailed)		.002	.000	.000	.000
Y.2	Sig. (2-tailed)	.002		.000	.002	.000
Y.3	Sig. (2-tailed)	.000	.000		.002	.000
Y.4	Sig. (2-tailed)	.000	.002	.002		.000
Y	Sig. (2-tailed)	.000	.000	.000	.000	
	N	32	32	32	32	32

Source: SmartPLS, 2025

The construct validity table shows that X1, X2, and Y have correlation coefficients with total scores for all statement items greater than 0.30 with a significance of less than 0.05. This indicates that the statement items in the research instrument are valid and suitable for use as a research instrument.

Table 7. Construct Reliability Test

	Cronbach's Alpha	N of Items
Construct X1	.873	5

Construct X2	.891	5
Construct Y	.841	4

Source: SmartPLS, 2025

The reliability test results for all variables show that all research instruments have a Cronbach's Alpha coefficient of more than 0.60. Thus, it can be stated that all variables have met the reliability requirements and can be used for further research.

Measurement Model Evaluation (*Outer Model*)

Measurement model evaluation of the convergent validity test, AVE test, discriminant validity test, composite reliability test, and cronbach's alpha test as follows :

Table 8. Measurement Model Evaluation

No	Measurement Model Evaluation	Explanation
1	Convergent Validity Test	Loading factor value : Digital Financial Literay (X1) = 0.815 Fintech Payments (X2) = 0.836 MSMEs Financial Performance = 0.827
2	Average Variance Extracted (AVE)	AVE value : Digital Financial Literay (X1) = 0.665 Fintech Payments (X2) = 0.698 MSMEs Financial Performance = 0.684
3	Discriminant Validity Test	Cross loading value : X1.1 ; X1.2; X1.3; X1.4; X1.5 → 0.792 ; 0.808 ; 0.834 ; 0.785; 0.856 X2.1 ; X2.2; X2.3; X2.4; X2.5 → 0.837 ; 0.860 ; 0.829 ; 0.853 ; 0.798 Y.1 ; Y.2; Y.3; Y.4; Y.5 → 0.855 ; 0.805 ; 0.842 ; 0.806
4	Composite Reliability and Cronbach's Alpha Tests	Composite Reliability value : Digital Financial Literay (X1) = 0.908 Fintech Payments (X2) = 0.920 MSMEs Financial Performance = 0.897 Cronbach's Alpha value : Digital Financial Literay (X1) = 0.874 Fintech Payments (X2) = 0.892 MSMEs Financial Performance = 0.846

Source : SmartPLS, 2025

Convergent Validity

The loading factor table shows that each variable X1, X2, and Y has met the convergent validity requirement with a loading factor value > 0.7.

Discriminant Validity

Based on the Cross Loading table, it shows that each indicator in the target variable has a higher cross loading value than the cross loading value in other variables. These results can be interpreted as indicating that there is a correlation between the indicators of one variable and other variables, namely that there is a relationship or correlation between the indicators of each variable of digital financial literacy, use of financial technology for payments, and the financial performance of MSMEs. The correlation between these variables can be illustrated in the loading factor as follows:

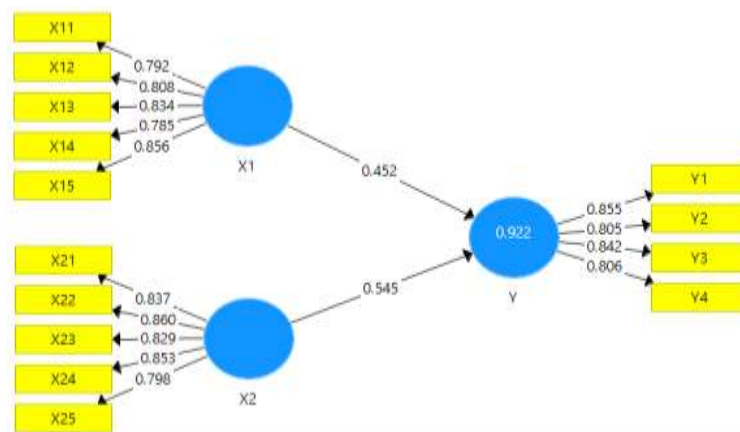


Figure 2. Loading factor

Average Variance Extracted (AVE)

The construct reliability and validity table shows that all variables in this study have an AVE value > 0.5 . These results can be interpreted as meaning that the AVE value for the digital financial literacy variable (X1) of 0.665 is greater than the variance of the indicators that can be possessed. The AVE value for the variable of financial technology payment usage (X2) is 0.698, which is greater than the variance of the indicators that can be possessed. The AVE value for the variable of MSME financial performance (Y) is 0.684, which is greater than the variance of the indicators that can be possessed. These results show that all three are > 0.5 , so all variables can be declared valid and meet the Average Variance Extracted (AVE) criteria.

Composite Reliability and Cronbach's Alpha Tests

The construct reliability and validity table shows that the variables in this study, namely digital financial literacy, use of financial technology for payments, and MSME financial performance, have a composite reliability value > 0.7 and a Cronbach's alpha value > 0.7 , so they can be declared valid. These results can be interpreted as meaning that all variables are reliable and meet the composite reliability and Cronbach's alpha criteria, namely that the variables of digital financial literacy, use of payment financial technology, and MSME financial performance have consistency or accuracy in the indicators used to measure a variable.

Structural Model Evaluation

Structural model evaluation with reflective indicators consists of the R Square (R²) test, the Predictive Relevance (Q²) test, and partial test as follows:

Table 9. Structural Model Evaluation

No	Structural Model Evaluation	Explanation
1	R Square (R ²) test	MSMEs Financial Performance (Y) = 0,916
2	Predictive Relevance (Q ²) test	$Q^2 = 1 - (1 - R^2)$ $= 1 - (1 - 0,916)$ $= 0,916$
3	Statistical t-test with Partial Test	$X_1 \text{ to } Y \rightarrow p \text{ values} = 0.001$ $X_2 \text{ to } Y \rightarrow p \text{ values} = 0.000$

Source : SmartPLS, 2025

R Square Test (R²)

The R Square (R²) table shows an R-square value of 0.916, which means that the financial performance of MSMEs (Y) can be explained by the variables of digital financial literacy (X₁) and the use of financial technology for payments (X₂) by 91.6%, while the remaining 8.4% is explained by other variables.

Predictive Relevance Test (Q-Square (Q²))

The calculations show that the Q² value is greater than 0 (= 0.916), so it can be interpreted that the model is good because it has a relevant predictive value of 91.6%.

Statistical t-test with Partial Test (t-test)

The results of the $t_{\text{statistic}}$ calculation and the influence between variables in the t-test results table, the p-values for X1 and X2 are $0.001 < 0.05$ and $0.000 < 0.05$, respectively, meaning that each variable of digital financial literacy (X1) and use of financial technology for payments (X2) significantly affects the financial performance of MSMEs (Y).

DISCUSSION

Digital Financial Literacy on the Financial Performance of MSMEs

The results of the study show that digital financial literacy has a positive and significant effect on the financial performance of MSMEs. This is in line with research by Felix Demetrius, et al. (2022) that financial literacy and the use of fintech have a positive and significant effect on MSME performance. Balqis, et al. (2022) concluded that financial literacy and the use of QRIS have a significant effect on increasing MSME income. In line with Lubis et al. (2021), who concluded that financial literacy, P2P lending fintech, and payment gateways simultaneously explain 70.7% of the variation in MSME financial performance. This study shows that the ease of digital payments accompanied by an understanding of digital finance can increase the productivity and sales of MSMEs, thereby having a positive effect on their financial performance.

An accounting perspective, the enhancement of digital financial literacy plays a crucial role in strengthening the financial information systems of MSMEs, which in turn contributes to improving their financial performance in Maros Regency. Digital financial literacy significantly influences the financial performance of MSMEs in Maros Regency because it enables business owners to understand and apply financial accounting principles appropriately, thereby directly contributing to better financial outcomes through efficiency, reliability, and transparency in financial reporting.

According to financial accounting theory, financial statements must present information that is relevant, reliable, and useful for economic decision-making (Scott, 2015). The findings of this study support the theory, showing that MSME owners in Maros Regency who possess strong digital financial literacy are able to: 1) understand how financial transactions are properly recorded and classified in accordance with accounting principles; 2) use digital

applications or platforms to produce accurate and real-time financial reports; and 3) ensure the reliability of financial data generated from automated digital system.

This capability of MSMEs in Maros Regency reflects their ability to comply with key principles of financial reporting such as revenue recognition, cash measurement, and information disclosure in accordance with PSAK EMKM established by the Indonesian Institute of Accountants. Overall, the enhancement of digital financial literacy contributes to the presentation of financial information that is relevant, reliable, and useful for decision-making, reinforcing the application of financial accounting theory in the digital business environment.

The Use of Payment Fintech on Financial Performance

The use of payment fintech such as digital wallets has been proven to support financial performance of MSMEs in Maros Regency. This finding is in line with Gita Mai Rani, et al. (2023), who found that the use of digital payments has a positive effect on the performance of MSMEs. Similarly, research by Larissa Adella Octavina, et al. (2021) concluded that fintech payment gateways, digital marketing, and financial literacy have a positive effect on the performance of MSMEs. This study shows that MSMEs in Maros Regency tend to use fintech payments and take advantage of the benefits offered by this technology can improve their financial performance.

The use of fintech payment platforms such as QRIS, OVO, GoPay, Dana, and ShopeePay provides significant contributions to operational cost efficiency and increases transaction speed of MSMEs in Maros Regency. This supports the timeliness principle in accounting namely the provision of financial information that is both prompt and relevant for decision-making. The findings of this study, showing that MSME owners in Maros Regency who possess the use of fintech payment helps to : 1) Accelerate the cash receipt cycle, thereby improving a company's liquidity; 2) Reduce transaction costs and manual calculation errors, which enhances the efficiency and accuracy of financial reporting; 3) Increase profitability and accounting efficiency, as all transaction data can be directly integrated into digital financial recording systems.

The use of fintech payment systems supports the core objective of financial accounting theory, which is to provide relevant and reliable information to financial statement users for rational economic decision making. In practice, the integration between digital financial literacy and fintech utilization enables MSME actors in Maros Regency to prepare financial reports in accordance with SAK EMKM (Indonesian Financial Accounting Standards for MSMEs) more efficiently, transparently, and accountably.

CONCLUSION

The coefficient value is positive, which means that as digital financial literacy and the use of financial technology for payments increase, the financial performance of MSMEs also increases. Digital financial literacy has a positive and significant effect (p value 0.001) on the variable of MSME financial performance and payment financial technology usage has a positive and significant effect (p value 0.000) on the variable of MSME financial performance. MSME financial performance can be explained by the variables of digital financial literacy and payment financial technology usage by 91.6%, while the remaining 8.4% is explained by other variables.

Practical recommendations: Government and MSME trainers need to organize comprehensive digital financial literacy training accompanied by fintech implementation; Fintech providers must prioritize user-friendly digitalization and education on the use of applications for MSME players; MSMEs actively utilize digital literacy and payment technologies to improve financial performance.

The author suggests that future researchers re-test this research model by increasing the number of respondents to strengthen the nature of the influence, add new variables that still affect SME financial performance variables, and further specify the preferences for payment financial technology used.

REFERENCES

- Balqis, N., Sari, E., & Rahmawati, D. (2022). Digital literacy, QRIS adoption, and MSME financial performance in Indonesia. *Journal of Business and Digital Innovation*, 6(2), 45–57. <https://doi.org/10.xxxx/jbdi.2022.45>

- Candraningrat, I. R., Dewi, V. I., & Dewi, P. A. K. (2025). *Impact of Fintech on Financial Performance of MSMEs in Bali with Financial Literacy as Moderator*. Journal of Management, Accounting and Business, 12(1), 45–58.
- Demetrius, R., & Yusbardini. (2022). The role of financial literacy and fintech adoption in MSME growth. Indonesian Journal of Finance, 8(1), 22–35.
- Edo, R., Soma, A., & Sitorus, B. (2024). *Factors Influencing Fintech Adoption Among MSMEs in Bandung, West Java*. Journal of Accounting and Financial Studies, 9(2), 134–148.
- Febriyani, N. (2024). Digital transformation of MSMEs in South Sulawesi: Opportunities and challenges. Journal of Economic Development Studies, 9(1), 88–99.
- Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2020). Managerial Accounting (17th ed.). McGraw-Hill Education.
- Ghozali, I., & Latan, H. (2015). Partial least squares: Concepts, methods, and applications using SmartPLS 3.0 for empirical research. Universitas Diponegoro Press.
- Gomber, P., Koch, J., & Siering, M. (2017). Digital finance and fintech: Current research and future research directions. Journal of Business Accounting Economics, 87(5), 537–580. <https://doi.org/10.1007/s11573-017-0852-x>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). SAGE Publications.
- Lubis, M., Haryanto, S., & Taufiq, M. (2021). Fintech adoption, financial literacy, and MSME performance in Indonesia. Journal of Financial Technology, 3(4), 102–115.
- Nurchayati, A., Lestari, D., & Supriyono, H. (2024). Empowering MSMEs through digital literacy: A case study in Indonesia. Journal of Entrepreneurship and Development, 12(1), 60–74.
- Nurchayati, E., Ariyanti, L., & Marianingsih, P. (2024). *How Fintech Adoption, Digital Payment Systems, and Consumer Trust Shape Financial Performance of MSMEs*. International Journal of Business and Law Education, 6(2), 211–225.
- Octavina, D., & Rita, R. (2021). The impact of fintech payment gateways and financial literacy on MSME performance. Journal Applied Economics, Accounting and Business, 9(3), 76–89.
- Pitaloka, D., & Afandy, H. (2025). *From Fintech to Competitiveness: Financial Sustainability Performance of MSMEs in the Digital Era*. Management Accounting Journal, 17(3), 155–169.
- Putra, G., & Lasmi, L. (2025). *Boosting MSMEs: How Digital Financial Innovation and Financial Literacy Fuel Access to Finances*. Iqtishaduna: Journal of Islamic Economics, 7(1), 77–90.
- Putri, L., & Christiana, I. (2021). Digital financial literacy and MSME sustainability in the digital economy. Journal of Finance and Entrepreneurship, 7(2), 112–125.

Rani, N., & Desiyanti, D. (2023). Fintech usage and business performance among micro and small enterprises in Indonesia. *Journal of Digital Economy*, 11(1), 55–67.

Scott, W. R. (2015). *Financial accounting theory* (7th ed.). Pearson Education.

Zaimovic, T., Omerovic, N., & Husic-Mehmedovic, M. (2025). Digital financial capability and small business growth in developing economies. *Journal of Financial Innovation*, 15(2), 199–212.