

FINANCIAL LITERACY, CASH FLOW MANAGEMENT, AND FINANCIAL DIGITALIZATION ON THE FINANCIAL PERFORMANCE OF MSMEs

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ABSTRACT

Research Objectives - This study aims to analyze the effects of financial literacy, cash flow management, and financial digitalization on the financial performance of fashion MSMEs (UMKM) supported by business incubators in Makassar City, Indonesia.

Method - This study employs a quantitative approach involving 85 MSME owners using a saturated sampling technique. Data were collected through questionnaires and analyzed using multiple linear regression with SPSS version 32, based on the Resource-Based View (RBV) and Technology Acceptance Model (TAM) frameworks.

Research Findings - Financial literacy has a positive and significant effect on financial performance and cash flow management, while financial digitalization has a positive but statistically insignificant effect on financial performance. Simultaneously, the three variables have a significant effect on financial performance.

Theory and Practical Implications - MSME development initiatives should prioritize financial literacy and disciplined cash flow management. Financial digitalization should be accompanied by appropriate assistance and training to ensure that technological benefits are effectively integrated into business decision-making.

Novelty - This study integrates the RBV and TAM frameworks to explain the financial performance of fashion MSMEs. Its key contribution is the finding that financial literacy and cash flow management have significant partial effects on financial performance, whereas financial digitalization does not.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting economic growth, job creation, and the strengthening of local economies. Amid the development of the digital economy, MSME success is determined not only by the ability to generate sales but also by the capacity to manage finances, maintain liquidity, and utilize technology productively. One of the key challenges in MSME transformation is ensuring that the use of financial technology genuinely improves business performance rather than merely changing transaction channels. Lusardi and Mitchell (2014) explain that financial literacy constitutes a form of knowledge capital that influences the quality of economic decision-making. Meanwhile, Rahayu and Day (2017), in their study of Indonesian MSMEs, highlight the importance of technological readiness and perceived benefits in e-commerce adoption. These findings suggest that financial capabilities and technology utilization should be understood as interconnected components of the process of improving business performance.

Although research on financial literacy and MSME performance has expanded, there remains a need to explain how financial knowledge translates into financial outcomes in day-to-day business operations. Lusardi and Mitchell (2014) position financial literacy as knowledge capital that helps individuals make better financial decisions. From the perspective of the Resource-Based View (RBV), Barney (1991) argues that valuable, rare, inimitable, and non-substitutable resources can serve as the foundation for sustainable competitive advantage. From this perspective, financial literacy can be

viewed as a knowledge-based resource that supports budgeting, profit assessment, financing decisions, and cost control. However, financial knowledge does not automatically guarantee strong performance unless it is translated into disciplined management practices. Therefore, financial literacy needs to be examined alongside other managerial capabilities, particularly cash flow management, to provide a more comprehensive explanation of MSME financial performance.

Another research gap concerns cash flow management and financial digitalization. Cash flow management helps maintain a balance between cash inflows and outflows, enabling businesses to meet their operating obligations, while digitalization has the potential to improve recording efficiency, transaction speed, and the availability of financial information. Enqvist et al. (2014) demonstrate that working capital management is associated with corporate profitability and that its importance may vary across economic conditions. Regarding technology, Rahayu and Day (2017) identify several factors influencing e-commerce adoption among Indonesian MSMEs, including perceived benefits and technological readiness. These findings indicate that technology utilization cannot be separated from organizational readiness and internal management capabilities. In the context of this study, the empirical gap lies in the need to simultaneously examine financial literacy, cash flow management, and financial digitalization, particularly among fashion MSMEs supported by business incubators in Makassar. Integrating the RBV and the Technology Acceptance Model (TAM) also enables this study to explain two distinct dimensions: internal capabilities and technology acceptance. Davis (1989) emphasizes the role of perceived usefulness and perceived ease of use in technology acceptance; however, technology acceptance alone does not demonstrate that technology will improve financial performance.

The novelty of this study lies in the integrated examination of financial literacy, cash flow management, and financial digitalization in relation to the financial performance of fashion MSMEs supported by business incubators in Makassar, using the RBV and TAM frameworks. Unlike approaches that emphasize internal resources or technology adoption separately, this study assesses the contributions of all three factors within a single regression model. Its empirical contribution lies in the finding that financial literacy and cash flow management have positive and statistically significant effects, whereas financial digitalization has a positive but statistically insignificant partial effect. These findings demonstrate that the benefits of technology must be interpreted contextually and cannot be assumed to translate directly into improved financial performance. This study also enriches the discussion of how knowledge resources, disciplined cash management, and technology utilization can complement one another in supporting MSME sustainability.

Based on these research gaps, this study aims to analyze the partial and simultaneous effects of financial literacy, cash flow management, and financial digitalization on the financial performance of fashion MSMEs supported by business incubators in Makassar City. Theoretically, this study is expected to extend the application of the RBV and TAM frameworks in explaining small-business financial performance. Practically, its findings may inform business owners, business incubator managers, and policymakers in designing programs to strengthen financial capabilities and digitalization. This study has several limitations, as it involves only 85 fashion MSMEs in a single local context, relies on perception-based questionnaire data, and examines three independent variables. Consequently, the findings cannot be directly generalized to all MSMEs or interpreted as definitive evidence of causality. Future research could include more diverse sectors and geographical areas, combine perceptual data with objective financial statements, and examine additional factors such as access to financing, digital competence, and the quality of financial recording systems.

METHOD

This study employs a quantitative approach with an explanatory research design to examine the relationships between financial literacy, financial digitalization, and the financial performance of Micro, Small, and Medium Enterprises (MSMEs). A quantitative approach is appropriate for testing hypotheses regarding relationships among variables through numerical measurement and statistical analysis. Multiple linear regression enables the effects of each independent variable to be analyzed while controlling for the presence of the other independent variables. This approach is consistent with financial and business performance research that uses measurable data to examine empirical

relationships. The conceptual foundation of this study integrates the Resource-Based View (RBV) proposed by Barney (1991), which emphasizes the importance of internal resources, and the Technology Acceptance Model (TAM) developed by Davis (1989), which explains technology acceptance in terms of perceived usefulness and perceived ease of use. The study was conducted among fashion MSMEs supported by business incubators in Makassar City, Indonesia, with a population of 85 business owners. All members of the population were included as respondents using a census sampling technique. Accordingly, the analysis focuses on explaining statistical relationships within the group of MSMEs covered by the study.

The study uses primary data collected through questionnaires distributed to 85 fashion MSME owners supported by business incubators in Makassar. The research instrument employs a five-point Likert scale to measure respondents' perceptions of the indicators for each variable. Financial literacy is measured through financial statement comprehension, financing knowledge, and investment knowledge. Cash flow management is measured through cash planning, separation of personal and business finances, and periodic cash flow evaluation. Financial digitalization is measured through the intensity of technology use, perceived ease of use, and perceived usefulness. Financial performance is measured based on respondents' perceptions of profitability, liquidity, and business efficiency. Perception-based questionnaires were selected because not all MSMEs maintain formal financial statements in a standardized format. Nevertheless, this approach has limitations, as respondents' answers may be influenced by subjective perceptions and may not always correspond to objectively recorded financial conditions.

Data analysis was conducted using IBM SPSS Statistics version 32. The first stage involved descriptive statistics to characterize the respondents and describe the distribution of variable scores. The second stage assessed instrument quality through the Pearson Product-Moment correlation test for validity and Cronbach's alpha for reliability. The third stage involved classical assumption tests, including residual normality, multicollinearity, and heteroscedasticity. Subsequently, multiple linear regression was employed to estimate the effects of the independent variables on financial performance using the following equation:

$$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + e$$

Where: Y represents financial performance, X1 represents financial literacy, X2 represents cash flow management, and X3 represents financial digitalization. Hypothesis testing was conducted using the t-test to identify partial effects, the F-test to assess the overall statistical significance of the model, and the adjusted coefficient of determination (adjusted R²) to evaluate the proportion of variation in financial performance explained by the model. The significance level was set at 5%.

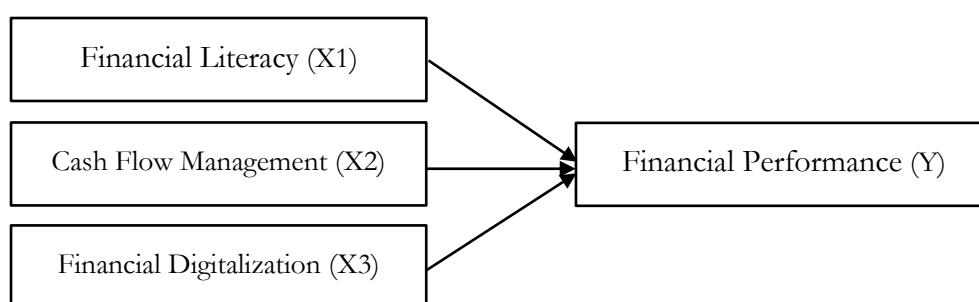


Figure 1 Conceptual Framework

RESULTS AND DISCUSSION

Multiple Linear Regression Analysis Results. The multiple linear regression analysis indicates the direction and magnitude of the effects of each independent variable on the financial performance of Micro, Small, and Medium Enterprises (MSMEs). A summary of the regression coefficients is presented in Table 1.

Table 1. Multiple Linear Regression Analysis Results

Variable	B Coefficient	Direction of Effect
Constant	1.226	-
Financial Literacy	0.243	Positive
Cash Flow Management	0.356	Positive
Financial Digitalization	0.261	Positive

Source: Data processed using SPSS version 32 (2026).

As shown in Table 1, all independent variables have positive regression coefficients. Cash flow management has the largest unstandardized regression coefficient ($B = 0.356$) among the three variables. Meanwhile, financial literacy has a coefficient of 0.243, and financial digitalization has a coefficient of 0.261.

Based on these results, the multiple linear regression equation is expressed as follows:

$$Y = 1,226 + 0,243X_1 + 0,356X_2 + 0,261X_3 + e$$

Partial Hypothesis Testing Results. Partial hypothesis testing was conducted using the t-test at a significance level of 5%. The test results are presented in Table 2.

Table 2. t-Test Results

Variable	t-Statistic	Sig.	Decision
Financial Literacy	2.367	0.020	Significant
Cash Flow Management	2.522	0.014	Significant
Financial Digitalization	1.651	0.103	Not significant

Source: Data processed using SPSS version 32 (2026).

The results in Table 2 indicate that financial literacy and cash flow management have positive and statistically significant effects on MSME financial performance, as their significance values are below 0.05. In contrast, financial digitalization has a positive coefficient but does not have a statistically significant effect, with a significance value of 0.103, which exceeds the 0.05 threshold.

Simultaneous Testing and Coefficient of Determination. Simultaneous testing was conducted to determine whether the three independent variables jointly influence MSME financial performance. The model's explanatory power is assessed using the coefficient of determination.

Table 3. Simultaneous Test and Coefficient of Determination Results

Indicator	Value	Interpretation
F-statistic	32.228	The model is jointly significant
F-test significance	< 0.001	Below 0.05
Adjusted R ²	0.627	The model explains 62.7% of the variation in financial performance
Variation outside the model	37.3%	Attributable to other factors

Source: Data processed using SPSS version 32 (2026).

Hasil pengujian menunjukkan bahwa literasi keuangan, dan digitalisasi keuangan secara simultan berpengaruh signifikan terhadap kinerja keuangan UMKM. Nilai Adjusted R² sebesar 0,627 menunjukkan bahwa ketiga variabel tersebut menjelaskan 62,7% variasi kinerja keuangan, sedangkan 37,3% sisanya berkaitan dengan faktor-faktor lain di luar model penelitian.

The Effect of Financial Literacy on MSME Financial Performance. The findings indicate that financial literacy has a positive and statistically significant effect on MSME financial performance, with a regression coefficient of 0.243 and a significance value of 0.020. This finding suggests that business owners' ability to understand financial concepts, prepare budgets, manage capital, and make financial decisions is associated with better financial performance.

This finding can be explained through the Resource-Based View (RBV) proposed by Barney (1991). The RBV posits that internal resources and capabilities constitute an important foundation for developing competitive advantage. In the context of MSMEs, financial literacy can be regarded as a knowledge-based resource that helps business owners allocate capital, control costs, and evaluate operational outcomes more rationally.

These findings are consistent with Sanistasya et al. (2019), who found that financial literacy positively affects the performance of small businesses in East Kalimantan. Hererra et al. (2023) also reported a positive relationship between financial literacy and MSME performance, including through financial access, risk management, and competitive advantage. Furthermore, Riyadi and Hadyarti (2024) found that financial knowledge, literacy, and capabilities have positive and statistically significant effects on MSME performance in Sampang Regency.

These findings reinforce the view that financial literacy is not merely theoretical knowledge but also a practical capability that enables business owners to manage resources effectively. Therefore, MSME development programs should incorporate training in budgeting, financial recordkeeping, cost analysis, and periodic performance evaluation.

The Effect of Cash Flow Management on MSME Financial Performance. The results indicate that cash flow management has a positive and statistically significant effect on MSME financial performance, with a regression coefficient of 0.356 and a significance value of 0.014. This variable has the largest unstandardized B coefficient among the three independent variables in the research model. The finding suggests that cash flow management plays an important role in explaining variations in the financial performance of the MSMEs examined.

Theoretically, this finding can be explained through the RBV framework (Barney, 1991), particularly by conceptualizing cash flow management as an internal business capability. The ability to forecast cash inflows and outflows, maintain adequate cash balances, and control working capital enables MSMEs to meet their operating obligations and reduce the risk of liquidity shortages. This capability is particularly important because reported profits do not necessarily indicate that a business has sufficient cash to finance its day-to-day operations.

This result is consistent with Enqvist et al. (2014), who examined the relationship between working capital management and corporate profitability in Finland. Their study demonstrated that the relationship between working capital management and profitability is also influenced by business cycle conditions. Although the context of Enqvist et al.'s study differs from that of fashion MSMEs in Makassar, their findings provide empirical support for the importance of working capital management in financial performance.

Accordingly, the findings underscore the importance of disciplined cash flow management practices, such as separating personal and business finances, preparing cash flow projections, monitoring receivables, and aligning expenditures with available financial resources. For business incubators, providing assistance in cash flow management may be a priority because this variable has the largest regression coefficient in the tested model. However, a larger unstandardized B coefficient does not necessarily establish that a variable has the strongest statistical effect when the variables are measured on different scales. Assessing relative importance requires consideration of standardized coefficients.

The Effect of Financial Digitalization on MSME Financial Performance. The test results show that financial digitalization has a positive regression coefficient of 0.261 but does not have a statistically significant effect on MSME financial performance, with a significance value of 0.103. Therefore, the hypothesis concerning the positive and significant effect of financial digitalization is not supported at the 5% significance level.

This finding can be explained through the Technology Acceptance Model (TAM) developed by Davis (1989). TAM emphasizes that technology acceptance is associated with perceived usefulness and perceived ease of use. In this study, the adoption of financial technology may not directly improve business performance if it has not been integrated into transaction recording, cash flow control, and financial decision-making. In other words, using technology and leveraging technology to improve business management are two distinct processes.

Affandi et al. (2024), in their study of digital adoption, business performance, and financial literacy among ultra-micro, micro, and small enterprises in Indonesia, provide relevant empirical context for examining the relationship between digitalization and business performance. Meanwhile, Kurniasari et al. (2025), in a study involving 469 MSMEs in Indonesia, found that financial literacy, financial technology adoption, and access to financing are interrelated in explaining business

performance and sustainability. Their study also highlights the importance of access to financing as a mechanism linking technology use and financial literacy to business outcomes.

Differences between the findings of this study and those of previous research may be associated with respondent characteristics, levels of digital maturity, the types of technologies used, and the extent to which technology is integrated into financial management processes. However, these factors remain possible explanations and cannot be confirmed as the causes of the statistically insignificant result in this study.

Therefore, the finding does not imply that financial digitalization provides no benefits to MSMEs. A more appropriate conclusion is that this study has not found sufficient statistical evidence of a partial effect of financial digitalization on financial performance. Digitalization initiatives should therefore be accompanied by training, systematic financial recordkeeping, and the effective use of transaction information to support business decisions.

The Simultaneous Effects of Financial Literacy, Cash Flow Management, and Financial Digitalization on MSME Financial Performance. The simultaneous test results indicate that financial literacy, cash flow management, and financial digitalization jointly have a statistically significant effect on MSME financial performance, with an F-statistic of 32.228 and a significance value below 0.001. The adjusted R^2 value of 0.627 indicates that the three variables jointly explain 62.7% of the variation in financial performance, while the remaining 37.3% is associated with factors not included in the research model.

This finding can be understood through the integration of the RBV and TAM frameworks. The RBV explains the importance of internal knowledge and capabilities, such as financial literacy and cash flow management, whereas TAM helps explain technology acceptance and utilization. Integrating these perspectives provides a framework for understanding how financial performance may be associated with a combination of managerial capabilities and appropriate technology use.

Empirically, the studies by Sanistasya et al. (2019) and Herrera et al. (2023) indicate that financial literacy is associated with business performance and may operate through other factors, including financial inclusion, risk management, and competitive advantage. Meanwhile, Kurniasari et al. (2025) emphasize the interrelationships among financial literacy, technology adoption, and access to financing in explaining MSME performance and sustainability. These findings support the importance of viewing MSME performance as the outcome of a combination of capabilities and enabling conditions rather than a single factor in isolation.

Nevertheless, a statistically significant F-test does not imply that every independent variable has a statistically significant partial effect. The present findings demonstrate that financial digitalization is not statistically significant when examined individually. Therefore, the practical implications include strengthening financial literacy and cash flow management while promoting technology utilization in a gradual and targeted manner. Future research could examine additional factors, such as access to financing, digital capabilities, business age, and business size, to explain the variation in financial performance that remains unaccounted for by the current model.

CONCLUSION

This study aims to analyze the effects of financial literacy, cash flow management, and financial digitalization on the financial performance of fashion Micro, Small, and Medium Enterprises (MSMEs) supported by business incubators in Makassar City, Indonesia. The results indicate that financial literacy has a positive and statistically significant effect on financial performance, with a significance value of 0.020. Cash flow management also has a positive and statistically significant effect, with a significance value of 0.014. Among the three variables in the reported model, cash flow management has the largest regression coefficient. In contrast, financial digitalization exhibits a positive but statistically insignificant partial effect, with a significance value of 0.103. Simultaneously, the three variables have a statistically significant effect on financial performance, with an adjusted R^2 of 62.7%. These findings indicate that strengthening financial knowledge and cash management capabilities should be prioritized to improve the financial performance of the MSMEs examined.

Compared with previous studies emphasizing the importance of financial literacy and technology adoption, this study contributes empirical evidence by examining all three variables within a single model integrating the Resource-Based View (RBV) and the Technology Acceptance Model (TAM). The finding regarding the significant effect of financial literacy is consistent with Lusardi and Mitchell (2014), while the finding concerning the importance of cash management aligns with Enqvist et al. (2014). However, the statistically insignificant effect of financial digitalization indicates that the benefits of technology are not always directly reflected in financial performance. Accordingly, the novelty of this study lies in highlighting that technology utilization needs to be accompanied by financial capabilities and disciplined cash flow management. The practical implications include the need for applied financial training, consistent cash flow recording, and ongoing assistance in digitalization. Given that this study is limited to 85 fashion MSMEs supported by business incubators in Makassar and relies on perception-based data, future research should test this model across different sectors and geographical areas and employ objective measures of financial performance.

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REFERENCES

- Affandi, Y., Ridhwan, M. M., Trinugroho, I., & Adiwibowo, D. H. (2024). Digital adoption, business performance, and financial literacy in ultra-micro, micro, and small enterprises in Indonesia. *Research in International Business and Finance*, 70, Article 102376. <https://doi.org/10.1016/j.ribaf.2024.102376>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Enqvist, J., Graham, M., & Nikkinen, J. (2014). The impact of working capital management on firm profitability in different business cycles: Evidence from Finland. *Research in International Business and Finance*, 32, 36–49. <https://doi.org/10.1016/j.ribaf.2014.03.005>
- Hasniaty, Kamal, K., Muhrami, S. N., Azis, M. S., Dwiyantri, Ahmad, M. I. S., Dewantara, H., Haslip, M. A., Nurhikmah, A. R., & Halim, N. (2026). *Inovasi dan kewirausahaan: Pendorong pertumbuhan ekonomi*. Andi Pandangai Press.
- Hererra, J. J. D., Warokka, A., & Aqmar, A. Z. (2023). Financial literacy and MSME performance: Mediation and moderation analysis. *Journal of Sustainable Economics*, 1(2), 65–76. <https://doi.org/10.32734/jse.v1i2.14304>
- Kurniasari, F., Hamid, N. A., & 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), Article 2487837. <https://doi.org/10.1080/23311975.2025.2487837>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Rahayu, R., & Day, J. (2017). E-commerce adoption by SMEs in developing countries: Evidence from Indonesia. *Eurasian Business Review*, 7, 25–41. <https://doi.org/10.1007/s40821-016-0044-6>
- Riyadi, M. P., & Hadyarti, V. (2024). The effect of financial knowledge, financial literacy, and financial capability on MSME performance. *Jurnal Ilmiah Manajemen Kesatuan*, 12(6), 2637–2648. <https://jurnal.ibik.ac.id/index.php/jimkes/article/view/3000>
- 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). <https://doi.org/10.21831/economia.v15i1.23192>

- Setiyawan, R., & Tambunan, D. B. (2026). Financial technology, financial literacy, and MSMEs' financial performance: The mediating role of financial inclusion in East Java. *Jurnal Entrepreneur dan Entrepreneurship*, 15(1). <https://doi.org/10.37715/jee.v15i1.6265>
- Sudharmasto, S., & Hastuti, T. D. (2025). Effect of financial literacy, financial reporting, and risk management on financial performance of MSMEs with innovative behavior as mediator. *E-Jurnal Akuntansi*, 35(3). <https://doi.org/10.24843/EJA.2025.v35.i03.p01>
- Tenrigau, A. M., Aida, N., Novita, D., & Dahlan, H. (2026). *Inovasi bisnis dan digitalisasi UMKM*. Andi Pandangai Press.
- Tenrigau, A. M., Tenrigau, A. P., Baharuddin, H., & Menne, F. (2026). *Transformasi digitalisasi UMKM*. Andi Pandangai Press.
- Tenrigau, A. M; Menne, F; Dahlan, A; & Aida, N. (2024). *Pengantar Akuntansi*. Andi Pandangai Press.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>