

Financial Literacy: Its Paradoxical Effect on MSME Financial Management in the Digital Era

Dhea Resthy Ananda ^{1*}, Muhammad Ilham Pakawaru ², Sugianto Sugianto ³, Rika Febby Rhamadhani ⁴

^{1*, 2} Faculty of Economics and Business, Tadulako University, Indonesia

Email: dhearesthy1703@gmail.com

ARTICLE HISTORY

Submitted : June 23, 2026
Reviewed : July 05, 2026
Revised : July 10, 2026
Accepted : July 14, 2026
Published : July 29, 2026

Conflict of Interest Statement:

The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ABSTRACT

Purpose: This study investigates the effects of financial literacy and financial technology (e-wallet usage) on the financial management practices of micro, small, and medium enterprises (MSMEs) in Palu City.

Research Method: A quantitative research design was employed using primary data collected through questionnaires administered to MSME owners. The proposed relationships were examined using Partial Least Squares Structural Equation Modeling (PLS-SEM) with WarpPLS.

Results and Discussion: The results indicate that financial literacy significantly influences MSME financial management. However, higher levels of financial knowledge do not automatically translate into more effective financial management practices. In contrast, e-wallet usage exhibits a positive but statistically insignificant effect, suggesting that digital payment adoption alone is insufficient to improve financial management. These findings reveal a persistent gap between financial capability, technology adoption, and the practical implementation of sound financial management.

Implications: Policymakers should complement financial literacy and digitalization initiatives with practical training that strengthens MSMEs' ability to integrate financial knowledge and digital technologies into everyday financial decision-making.

Originality: This study extends the MSME finance literature by simultaneously examining financial literacy and e-wallet adoption within an emerging economy context, demonstrating that digital financial technology does not necessarily enhance financial management unless supported by adequate financial capability and effective managerial application.

Keywords: financial literacy; financial technology; e-wallet; financial management; MSMEs.

1. Introduction

When it comes to local economies, small, medium, and micro enterprises (MSMEs) are crucial to growth, job generation, and stability. Nevertheless, the ability of company owners to efficiently manage financial resources is just as important as business capacity and market prospects for the sustainability of MSMEs. Financial management enables MSME actors to plan, record, control, and evaluate business activities, which ultimately influences their ability to maintain operational stability and long-term growth (Nufzatutsaniah *et al.*, 2023). Financial management is crucial, but many MSMEs still struggle with issues including poor planning, sloppy recordkeeping, a lack of control, and the temptation to mix business and personal funds. Given these factors, it is clear that entrepreneurs' capacity to convert their financial knowledge into consistent financial habits is a key component of efficient financial management.



It is well-known that financial literacy plays a role in how people handle their own money. Having a good grasp of money matters and being able to put that knowledge to use in areas such as budgeting, saving, managing credit, and financial planning are all components of financial literacy (Lusardi *et al.*, 2014). People involved in MSMEs need to be financially literate so they can manage their cash flow, weigh their options, and make sound business decisions. Higher levels of financial literacy are associated with greater money management and control abilities among entrepreneurs, according to research (Anggraeni, 2016; Rumbianingrum & Wijayangka, 2018). Because sound financial judgment also necessitates consistent action and real-world application, financial literacy alone is not enough to ensure sound financial management.

Ajzen (1991) explains the mismatch between theoretical understanding and practical application of financial concepts through the Theory of Planned Behavior (TPB). Theory of Planned Behavior (TPB). According to TPB, one's attitude, subjective norms, and sense of behavioral control all play a role in shaping one's intentions to behave in a certain way. Entrepreneurs' views and goals about responsible financial management may be impacted by financial literacy within the framework of MSMEs; however, actual financial behavior depends on whether entrepreneurs have the capability and commitment to apply such knowledge in daily business activities. Thus, entrepreneurs may understand financial principles but still face difficulties in implementing budgeting, recording, and financial control practices. This argument is supported by Herdjiono & Damanik (2016), who highlight that financial attitudes and individual characteristics also influence financial management behavior. Furthermore, Peter *et al.*, (2025) emphasize that entrepreneurial financial capability involves the interaction of financial knowledge, skills, and decision-making ability rather than knowledge alone.

Financial Technology (FinTech) has revolutionized financial activity, thanks to both increased financial capabilities and technical advancements. FinTech refers to the integration of technology into financial services to make financial transactions more accessible, efficient, and convenient (Kohardinata *et al.*, 2023). In the MSME context, one of the most widely adopted forms of FinTech is electronic wallet (e-wallet), which facilitates digital payments through platforms such as GoPay, OVO, DANA, and ShopeePay. The increasing adoption of e-wallets provides opportunities for MSMEs to conduct transactions more efficiently and adapt to digital economic transformation.

However, better financial management is not a given just because financial technology is available. The effectiveness of e-wallet utilization depends on how entrepreneurs perceive, understand, and integrate technology into their financial activities. Many MSME actors may use e-wallets primarily as payment instruments rather than as tools for financial monitoring, transaction recording, or business evaluation. Therefore, technology adoption should not only be viewed from the aspect of usage but also from the ability to generate meaningful improvements in financial practices (Husnayetti *et al.*, 2024; Oktary & Wardhani, 2023). This view aligns with TAM, which states that people are more likely to embrace technology if they believe it will be both valuable and easy to use. However, acceptance is not always indicative of successful use (Davis & Venkatesh, 1996).

Prior research has examined the connection between financial technology, financial literacy, and financial management in MSMEs. Research shows that attitudes, levels of financial knowledge, and the extent to which individuals are financially included all play a role in how MSMEs manage their finances (Anggriani *et al.*, 2023; Kusumaningrum *et al.*, 2023). Similarly, financial technology has been associated with improvements in transaction efficiency and business operations (Lestari *et al.*, 2024; Raharjo *et al.*, 2022). However, existing findings remain inconsistent because financial knowledge and access to digital financial tools do not always translate into effective financial behavior. Entrepreneurs with similar levels

of knowledge and technology access may demonstrate different financial management practices due to differences in behavioral discipline, financial habits, and digital capability.

This issue becomes particularly relevant in MSMEs in Palu City, where business actors operate with varying levels of financial capability and digital adoption. Because entrepreneurs' abilities to use information and technology determine how well they work, it is crucial to understand whether financial management practices reflect e-wallet utilization and financial literacy. Therefore, this study's overarching goal is to investigate the impact of financial literacy and digital wallets on the management of MSME funds in Palu City. This research adds to the literature by testing the hypothesis that MSME financial management practices may be enhanced with just digital financial tools and financial capabilities.

The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 presents Concluding Remarks and Recommendations.

2. Literature Review and Hypothesis Development

2.1 Financial Management Behavior Theory

Planning, organizing, regulating, and assessing financial decisions are all part of the financial management behavior theory that describes how people or company owners handle their financial resources. A key tenet of financial management is the idea that people's ability to implement financial practices consistently in real-world scenarios is just as important as having access to financial information when making financial decisions. Budgeting, recording transactions, controlling cash flow, keeping personal and business finances separate, and making financial decisions are all examples of financial management behavior as it pertains to MSMEs (Herdjiono & Damanik, 2016).

The concept of financial management behavior assumes that effective financial management requires the integration between financial capability and actual financial practices. The quality of financial management is determined by the capacity of MSME actors to translate their grasp of financial principles into everyday financial actions. So, managing one's finances is not only a brain function; it also necessitates a certain set of attitudes, a level of self-control, a certain amount of discipline, and experience. Previous research (Astuti & Soleha, 2023) shows that entrepreneurs' financial management is shaped by their attitudes, expertise, and control over their financial situation. The complete theoretical framework of this research is firmly grounded in Financial Management Behavior Theory. In other words, it proves that having knowledge and tools is not enough to manage money well; what really matters is consistently turning those talents into actions. Within this framework, the TPB is presented to elucidate the cognitive and motivational processes by which financial literacy impacts behavior related to financial management. In particular, TPB explains why financial literacy does not directly impact behavior, but rather functions via the development of attitudes, the perception of behavioral control, and the intention to behave.

This process explains why H1 is structured differently from a straightforward knowledge-behavior relationship. Along with TPB, the Technology Acceptance Model (TAM) considers how the use of electronic wallets could influence people's habits when it comes to handling their money. Perceived utility and ease of use influence behavioral intention to utilize technology, according to TAM, and acceptance does not necessarily result in successful use. Theoretically, this differentiation is important

because, in the context of micro, small, and medium enterprises (MSMEs), entrepreneurs may use electronic wallets as payment but not incorporate them into their financial planning or monitoring processes, therefore reducing their influence on financial management practices. Financial Management Behavior Theory (FPBT) lays out the behavioral aspects of financial management and the outcome construct; The Attitude and Behavior Model (TPB) describes the mental and intentional steps from financial literacy to action; and the Acceptance and Use Model (TAM) details the process by which financial technology is accepted and used. This integrated logic, not previous empirical results alone, provides the basis for each hypothesis.

2.2 Theory of Planned Behavior (TPB)

Attitude, subjective norms, and perceived behavioral control affect behavioral intention, which in turn influences individual behavior, according to Ajzen's (1991) Theory of Planned Behavior (TPB). According to this view, people take into account their confidence, skill, and the circumstances around an activity before carrying it out; hence, having information or awareness does not necessarily mean they will. In relation to MSME financial management, TPB provides an indispensable explanatory mechanism that Financial Management Behavior Theory alone cannot supply. While the theory of financial management behavior acknowledges that financial management conduct necessitates the application of theoretical knowledge, it refrains from delving into the specific mental mechanisms that facilitate this process. TPB addresses this deficiency by determining the factors that influence behavioral intention, including attitudes, norms, and control-based factors. The capacity and willingness of entrepreneurs to apply financial knowledge in day-to-day business operations determine the extent to which financial literacy improves their attitudes toward financial management and their perceived behavioral control over managing financial resources (Samekto, 2021). That is why TPB backs the claim that financial literacy is about more than just getting facts right; it is also about developing the skills that people use when making important financial decisions. Entrepreneurs who possess adequate financial understanding are expected to have better awareness and confidence in performing budgeting, recording, and controlling financial activities. Nevertheless, without behavioral consistency, financial literacy may not always lead to effective financial management practices.

2.3 Financial Literacy and MSME Financial Management

A person is considered financially literate if they can grasp basic financial ideas and use what they know to make sound financial decisions. According to Lusardi *et al.*, (2014), having a basic understanding of financial principles helps individuals make better decisions, reduce risk, and prepare for their financial future. In the MSME context, financial literacy becomes an important capability because entrepreneurs must manage various financial activities, including revenue management, operational costs, investment decisions, and financial planning (Aulia & Mulyadi, 2024). Based on Financial Management Behavior Theory, the ability to understand and manage one's own finances is a crucial skill for entrepreneurs. Entrepreneurs who possess a solid grasp of financial concepts are more likely to be adept at creating sound financial strategies, keeping costs in check, overseeing cash flow, and assessing the financial health of their businesses. Financial understanding allows MSME actors to make more rational decisions and avoid financial problems caused by poor planning and inadequate control (Rumbianingrum & Wijayangka, 2018). Prior research shows a correlation between financial literacy and how MSMEs handle

their financial management. Ardiansyah *et al.*, (2022) found that financial literacy is crucial for micro, small, and medium-sized enterprises (MSMEs) to improve their financial management procedures. Similarly, Munthay & Sembiring (2024) make a similar point, stressing that financial literacy helps with better financial management. This is because business owners who are well-versed in money management are more likely to be conscious of the need to plan and control their finances (Kodu *et al.*, 2023; Rizky & Fitriyah, 2024).

Despite this, being financially literate is no assurance of prudent money management. The existence of financial knowledge must be followed by the ability to apply such knowledge consistently (Rainnolv & Janrosl, 2025). Even with a basic understanding of money, some entrepreneurs still struggle to keep track of their finances, keep their personal and corporate finances separate, and create a financial strategy (Saputra *et al.*, 2026). This means that the connection between financial literacy and how people handle their money hinges on how well they put what they learn into practice (Anggraeni, 2016; Kusumaningrum *et al.*, 2023). The following hypothesis is advanced in light of these theoretical and practical considerations:

H1: *Financial literacy has a significant effect on MSME financial management behavior.*

2.4 Financial Technology (E-Wallet) and MSME Financial Management

Financial technology (FinTech) refers to the use of new technologies to make financial services more accessible, simpler, and faster. The development of FinTech has changed the way businesses conduct financial activities through digital payment systems, electronic transactions, and technology-based financial services (Kohardinata *et al.*, 2023). One of the most commonly used FinTech services among MSMEs is an electronic wallet (e-wallet), which enables business actors to conduct transactions digitally without relying on cash-based payment systems (Rifqiah & Pujianto, 2023). The Technology Acceptance Model (TAM) explains the connection between financial technology and financial managers' behavior, as developed by Davis & Venkatesh (1996). TAM identifies perceived utility and ease of use as two factors that influence technology adoption. Business owners are more inclined to embrace and make use of technology when they see it as useful and user-friendly (Mujahidin, 2020). In MSMEs' financial management, e-wallet usage might lead to better financial practices. This is because e-wallets streamline transactions, make payments easier, and provide transaction records, which can help with financial monitoring. Financial technology can assist entrepreneurs in managing financial activities more effectively by reducing transaction barriers and improving access to digital financial services (Raharjo *et al.*, 2022). Thus, Lestari *et al.*, (2024) highlight that financial technology contributes to improving financial management practices by supporting operational efficiency and financial accessibility.

Nevertheless, technology availability does not automatically improve financial management behavior. How much digital financial features are used beyond simple payment transactions is a key factor in how beneficial financial technology is for businesses. If e-wallets are only used as payment instruments without being integrated into financial planning, recording, and monitoring activities, their contribution to financial management improvement may remain limited (Husnayetti *et al.*, 2024). Therefore, fintech adoption should be understood as a process that requires not only access but also digital capability and effective utilization. Based on these arguments, the following hypothesis is proposed:

H2: *Financial technology (e-wallet) has a significant effect on MSME financial management behavior.*

3. Research Method

3.1 Research Design

To investigate the connection between financial literacy, financial technology (e-wallet), and MSME financial management behavior, this study uses a quantitative research technique within the positivist paradigm. Financial literacy (X_1) and financial technology (X_2) are the two independent factors in the study model. MSME financial management behavior (Y) is the dependent variable. Here is the formulated connection between the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

The variable Y denotes the behavior of MSME financial management, X_1 the financial literacy, X_2 the financial technology (e-wallet), β_0 the constant, β_1 and β_2 the route coefficients, and ε the error term.

3.2 Data and Data Collection

Using a structured questionnaire, this study obtains primary data from MSME players in Palu City. To ensure respondents could easily access the data, we used both online and offline methods to collect it, utilizing Google Forms and direct delivery. The elements of the questionnaire were developed based on prior research on management behavior, financial technology, and financial literacy. With a range from "strongly disagree" (1) to "strongly agree" (5), all variables were measured using a five-point Likert scale. Using a Likert scale, it assessed how well-versed respondents were in personal finance, how often they used online banking, and how they handled their own finances (Sugiyono, 2013).

3.3 Population and Sample

The population of this study consists of MSME actors operating in Palu City, particularly in the Balai Kota area. Considering that the exact number of active MSMEs within the research location could not be precisely identified, this study applied a non-probability sampling technique using incidental sampling. The research participants were chosen according to their availability and their desire to take part in the study. Although this technique may limit the generalization of findings, it is commonly applied in exploration research involving specific target groups with accessibility limitations. The sample size consisted of 86 MSME actors. For research models that incorporate predictive analysis and have relatively small sample sizes, this sample size is deemed adequate for PLS-SEM (Hair & Alamer, 2022)

3.4 Variable Measurement

To ensure construct validity, the variables in this study were assessed using indicators developed from prior research. Financial literacy (X_1), insurance knowledge, investing acumen, savings and credit comprehension, and general financial literacy were among the metrics used for measurement (Munthay & Sembiring, 2024). Perceived utility, usability, trustworthiness, social impact, self-efficacy, and privacy concerns were some of the variables used to assess financial technology (X_k), with an emphasis on e-wallet usage. The TAM and its variants provide theoretical foundation for these metrics; these models see technology adoption as a complex behavioral process involving several dimensions. This study

defines financial technology as the mental and physical effort micro, small, and medium-sized enterprise (MSME) players put into using e-wallet services for their financial transactions.

In the context of micro and MSMEs, monitoring raw consumption frequency alone does not represent the quality of technology integration into financial management routines. Therefore, this conceptualization is adopted on purpose. Entrepreneurs' level of engagement with e-wallet features beyond basic payment functionalities is determined by the psychological drivers and inhibitors that are captured by the selected metrics. Core TAM constructs like perceived usefulness and ease of use influence behavioral intention to use; trust-based adoption factors like credibility and privacy concerns are especially important in the context of digital financial services; social influence is the normative pressure from business networks and customers that drives adoption; and self-efficacy is the individual's capability to operate digital financial tools effectively.

Not just is the availability of tools important, but these characteristics also constitute the prerequisites for making effective use of technology. One conceptual limitation addressed is that this operationalization focuses on factors that influence technology adoption rather than actual usage behavior. Adding real-world usage frequency and feature-depth utilization as supplementary indicators can help future studies improve construct validity (Siskawati & Ningtyas, 2022). MSME financial management behavior (Y) was measured through indicators including budgeting, financial recording, financial control, financial planning, and payment management behavior (Herdjiono & Damanik, 2016). The operationalization of variables is presented in Table 1.

Table 1. Operationalization of Variables

Variable	Indicators	Sources
Financial Literacy (X_1)	Basic financial knowledge; Savings and credit; Investment; Insurance	Munthay & Sembiring (2024); Yanti (2019)
Financial Technology (X_2)	Perceived usefulness; Ease of use; Credibility; Social influence; Self-efficacy; Privacy concern	(Siskawati, E. N., & Ningtyas, M. N. (2022).
Financial Management (Y)	Budgeting; Expense recording; Financial balance; Financial planning; Timely payment	(Herdjiono, M. V. I., & Damanik, L. A., 2016).

Source: Processed by the Researcher (2026)

3.5 Data Analysis

One of the main analytical techniques used in this work is PLS-SEM, or Partial Least Squares Structural Equation Modeling. PLS-SEM was used because it can handle small samples without assuming multivariate normality, analyze complex structural models, and examine predictive correlations among latent variables (Fauzi, 2022; Hair & Alamer, 2022). The analysis was carried out using WarpPLS software. The data analysis approach had two main phases: evaluating the measurement model (the outer model) and the structural model (the inner model). In the outer model assessment, it examined how well the measuring constructs held up. In the inner model evaluation, it examined how well the research model explained the data by examining the relationships between latent variables (Streukens & Leroi-Werelds, 2016).

It verified the validity, reliability, and internal consistency of the measurement model. To evaluate convergent validity, the outer loading of the indicator and the Average Variance Extracted method were employed. A construct can explain the variance of its indicators when the AVE value is larger, and indicators appropriately portray the intended construct when the loading value is greater.

The Heterotrait-Monotrait Ratio (HTMT) was used to evaluate discriminant validity, which measures how well each construct reflects a separate notion. In addition, the internal consistency of each construct was evaluated by reliability testing, which utilized Cronbach's Alpha and Composite Reliability. A review of the structural model was conducted by examining the path coefficients, predictive relevance (Q^2), effect size (f^2), and coefficient of determination (R). The R^2 value was used to assess how well the independent variables explained the dependent variable. The f^2 value was used to assess how each exogenous construct affected the endogenous construct. The predictive power of the model was assessed using Q^2 . By analyzing path coefficients and p-values, the bootstrapping process was used to evaluate hypotheses about the importance of correlations between variables.

WarpPLS also provides several quality and model fit indices, such as APC, ARS, AVIF, and related measures. Prior to hypothesis testing, these indices were used to verify that the suggested structural model fulfilled all quality requirements.

4. Results and Discussion

4.1 Analysis Results

4.1.1 Data Collection and Descriptive Statistics

Moreover, WarpPLS offers several model fit and quality metrics, such as APC, ARS, AVIF, and related measures. Prior to conducting hypothesis testing, the suggested structural model was checked using these indices to ensure it met all necessary quality requirements.

Table 2. Questionnaire Distribution

Description	Total	Percentage
Distributed questionnaires	86	100%
Invalid questionnaires	0	0%
Valid questionnaires	86	100%

Source: Processed by the Researcher (2026)

Descriptive statistics of each research construct are presented in Table 3.

Table 3. Descriptive Statistics of Research Variables

Variable	Indicators	Mean	Std. Deviation	Minimum	Maximum
Financial Literacy (X1)	6 indicators	.816	1.333	1	5
Financial Technology (X2)	8 indicators	.614	1.013	1	5
Financial Management (Y)	6 indicators	.333	1.364	1	5

Source: Processed by the Researcher using WarpPLS (2026)

Table 3 shows that there is only a moderate amount of response on the financial literacy variable, with an average value of 2.816 and a standard deviation of 1.333. While the practical implementation of this knowledge in day-to-day company management may differ, it shows that MSME players usually grasp a few fundamental financial principles. With a mean score of 3.614 and a standard deviation of 1.013, the financial technology variable suggests that MSME players substantially use online wallets in their commercial activities. This exemplifies how MSME actors are increasingly embracing digital payment mechanisms. Along the same lines, the financial management variable averages 3.333 and has a standard deviation of 1.364. This indicates that MSME actors have implemented financial

management practices, but the consistency of planning, recording, and controlling financial activities may still differ across businesses.

4.2 Measurement Model Evaluation (Outer Model)

Before delving into the structural connections among variables, a measurement model review was carried out to determine the study constructs' validity and reliability. Several tests were conducted to guarantee that each construct accurately reflects its theoretical notion, including convergent validity, discriminant validity, and internal consistency reliability.

4.2.1 Convergent Validity (AVE)

To evaluate convergent validity, the outer loading of the indicator and the Average Variance Extracted method were employed. When the AVE value is higher than 0.50, researchers state that the construct can explain more than half of the indicator variance; an acceptable indicator is indicated when the loading value is larger than 0.70.

Table 4. Variance Extracted (AVE)

Variable	AVE
Financial Literacy (X_1)	0.789
Financial Technology (X_2)	0.541
Financial Management (Y)	0.551

Source: Processed by the Researcher (2026)

According to the findings, all of the constructs demonstrated satisfactory levels of convergent validity. With an AVE of 0.798, the financial literacy construct explains 79.8 percent of the variation in its indicators. Financial Technology attained a score of 0.541, and Financial Management attained a score of 0.551. Each construct satisfies the requirements for additional structural model analysis; also, the findings show that the indicators are adequately represented. The outer loading results show that all retained indicators significantly contribute to their respective constructs, with all p-values below 0.05. Indicators of financial literacy show high loading values, from 0.831 to 0.914. Financial Management indicators have loading values ranging from 0.711 to 0.908, while Financial Technology indicators have values between 0.438 and 0.875. These results prove that the indicators accurately assess the hidden variables for which they are designed.

To assess discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) was used. Discriminant validity is supported if the HTMT value is below the threshold. According to Table 5, all of the HTMT values, which range from 0.291 to 0.428, are lower than the conservative threshold of 0.85. According to these results, distinct aspects of MSME financial behavior may be explained by financial literacy, financial technology, and financial management.

Table 5. HTMT Ratio

Variable	X_1	X_2	Y
X_1	-	0.428	0.291
X_2	0.428	-	0.354
Y	0.291	0.354	-

Source: Processed by the Researcher (2026)

4.2.2 Reliability Test

To assess the internal consistency of each construct, the reliability test was administered using Cronbach's Alpha and Composite Reliability. When the result is more than 0.70, it means that the measurement items are reliable enough.

Table 6. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability
Financial Literacy (X ₁)	0.949	0.960
Financial Technology (X ₂)	0.870	0.900
Financial Management (Y)	0.706	0.788

Source: Processed by the Researcher (2026)

All constructions satisfy the specified reliability standards, according to the findings of the reliability evaluation. The indicators of Financial Literacy consistently represent the financial literacy concept across MSME actors, as evidenced by its good internal consistency (Cronbach's Alpha value of 0.949 and Composite Reliability of 0.960). Composite reliability is 0.900, and Cronbach's Alpha is 0.870, both of which indicate satisfactory reliability in Financial Technology. The metrics utilized to measure the conduct of MSME financial managers are adequately consistent, as shown by Financial Management's Cronbach's Alpha of 0.706 and Composite Reliability of 0.788. Therefore, all constructs satisfy the reliability requirement and are appropriate for further structural model evaluation.

4.3 Structural Model Evaluation (Inner Model)

4.3.1 Coefficient of Determination (R-Square)

Table 7. R-Square

Variable	R-Square	Adjusted R-Square
Financial Management (Y)	0.067	0.045

Source: Processed by the Researcher (2026)

The coefficient of determination (R-squared) was used to evaluate the structural model's data-explanation capabilities. With an R-squared value of 0.067 for financial management, the results show that financial literacy and financial technology account for 6.7% of the variance in MSME financial management behavior. The adjusted R-squared value of 0.045 indicates that the explanatory contribution is still 4.5% after accounting for the number of predictors in the model. A deep theoretical examination, not a cursory recognition, is required in light of this low R². Financial competence and technology adoption cannot fully explain MSME financial management behavior because of its complexity and multidimensionality. This is reflected in the low explanatory power. Most of the missing data probably comes from several different types of variables. To begin, whether financial knowledge leads to action is moderated by dispositional variables including financial attitude, financial self-efficacy, and locus of control (Herdjiono & Damanik, 2016; Astuti & Soleha, 2023). Second, the behavioral discipline needed for consistent financial management practice is shaped by entrepreneurial traits, such as entrepreneurial orientation, managerial self-efficacy, and company experience. Third, the current model may be subject to omitted variable bias because of contextual characteristics such as firm age, industry, revenue scale, and formal financial service access, which can independently affect financial

management behavior. Lastly, the structural model does not fully operationalize the attitude pathways proposed by TPB, since behavioral mediators such as financial intention and financial habit are not included. Despite these caveats, the model is still theoretically significant. This is because the two included constructs yield results consistent with the behavioral finance literature, and the Q^2 value of 0.120 indicates that the model is predictively relevant beyond chance. The parsimonious design provides a clearly limited basis for incremental expansion in future research. To offer a more comprehensive theoretical explanation of the financial management behavior of MSMEs, future research should include financial attitude, entrepreneurial orientation, digital capacity, and financial habit.

4.3.2 Predictive Relevance (Q^2)

Table 8. Predictive Relevance (Q^2)

Variable	R-Square
Financial Management (Y)	0.120

Source: Processed by the Researcher (2026)

To evaluate the model's predictive power, the predictive relevance (Q^2) value was utilized. With a value larger than zero, the model has predictive relevance; in this case, for MSME financial management, the Q^2 value is 0.120. This suggests that the built model can forecast the actions of MSME finance managers, but with low accuracy.

4.3.3 Effect Size (f^2)

Table 9. Effect Size (f^2)

Relationship	f^2 Value	Category
Financial Literacy → Financial Management	0.106	Small
Financial Technology → Financial Management	0.023	Small

Source: Processed by the Researcher (2026)

Both independent factors contribute little to the financial management of MSMEs, according to the impact size study. The impact size value of financial literacy is 0.106, suggesting that it contributes more than financial technology does. In contrast, financial technology has a very small impact size of only 0.023. These results suggest that technological advancements and financial awareness both play a part in how people handle their money. However, the real impact of these elements will depend on how MSME actors incorporate knowledge and digital access to finance into consistent financial practices. Goodness of Fit (GoF).

A poor level of overall model fit (GoF = 0.050) implies that the model can only provide a partial explanation for the data that is really there. To determine whether the suggested research model was sufficient, the model fit and quality evaluation was carried out using WarpPLS. With an APC of 0.193 and a p-value of 0.015, the results demonstrate that the suggested criteria are satisfied, suggesting that the inter-variable structural correlations are statistically significant. With values of 1.293 for the Average Variance Inflation Factor (AVIF) and 1.386 for the AFVIF, the model also shows acceptable collinearity conditions. The model does not have multicollinearity issues because these values are below the required level.

In addition, the model has a limited explanatory capability and an adequate overall fit, as shown by the Tenenhaus Goodness of Fit (GoF) value of 0.206. In addition, the model meets the criteria for the

NLBCDR and SSR, both of which indicate the reliability of the predicted structural links. Having said that, the 0.067 Average R-squared (ARS) value with a p-value of 0.132 does not indicate statistical significance. Although the model passes statistical muster, this result shows that financial technology and financial literacy explain very little of the behavior in MSME financial management. This data point to the possibility that MSME financial management practices are influenced by variables not included in the present model.

Table 10. Model Fit and Quality Indices

Indicator	Value	Criteria	Result
Average Path Coefficient (APC)	0.193 (p = 0.015)	p < 0.05	Accepted
Average R-squared (ARS)	0.067 (p = 0.132)	p < 0.05	Not supported
Average Variance Inflation Factor (AVIF)	1.293	≤ 5.00	Accepted
Average Full Collinearity VIF (AFVIF)	1.386	≤ 5.00	Accepted
Tenenhous Goodness of Fit (GoF)	0.206	≥ 0.10	Accepted (Small)
Statistical Suppression Ratio (SSR)	1.000	≥ 0.70	Accepted
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	1.000	≥ 0.70	Accepted

Source: Processed by the Researcher (2026)

4.3.4 Hypothesis Testing (Bootstrapping)

Table 11. Hypothesis Testing Results

Hypothesis	Coefficient	p-value	Result
H1	-0.280	0.003	Supported
H2	0.106	0.157	Not Supported

Source: Processed by the Researcher (2026)

With a p-value of 0.003 and a path coefficient of -0.280, the findings of the hypothesis testing demonstrate that financial literacy significantly impacts the financial management of MSMEs. Based on the p-value and the negative coefficient, we may deduce that the association is statistically significant and has a negative direction. Meanwhile, the path coefficient for financial technology (e-wallet) is 0.106, and the p-value is 0.157. Despite a positive correlation in the coefficient, the p-value is too high to be considered statistically significant. Hence, there is no evidence to support the second theory.

4.2 Discussion

In Palu City, Indonesia, this research looks at how financial literacy and a financial technology called an e-wallet affect the ways micro, small, and medium-sized enterprises (MSMEs) handle their finances. Statistical analysis of the data shows that financial technology does not influence the financial management practices of micro, small, and medium-sized enterprises (MSMEs), but financial literacy does. To add insult to injury, the coefficient of determination shows that financial technology and financial literacy account for only a small fraction of the variance in MSME financial management practices, implying that other, more systemic behavioral and managerial factors are at play. This finding supports the idea that businesses' ability to apply financial procedures consistently is an essential component of financial management, alongside financial knowledge and technical availability.

The fact that financial literacy has such a noticeable impact shows how crucial knowledge of money matters is for MSME financial management. Financially literate business owners are better equipped to manage their money, create and stick to budgets, and save for the future (Lusardi *et al.*, 2014). Higher levels of financial literacy do not necessarily correlate with more prudent fiscal management, as the inverse direction of the link suggests. This finding provides an important perspective because financial literacy is often expected to improve financial planning, financial control, and business decision-making capabilities (Anggraeni, 2016; Rumbianingrum & Wijayangka, 2018).

Financial Management Behavior Theory explains this finding by defining financial behavior as the way in which people use their financial knowledge, attitudes, and talents to manage their financial resources (Herdjiono & Damanik, 2016). Budgeting, tracking transactions, managing expenditures, and keeping personal and corporate funds separate are all examples of practical acts that demonstrate sound financial management techniques. Therefore, MSME actors with adequate financial literacy may still experience difficulties in implementing effective financial practices when strong financial habits and managerial discipline do not support financial knowledge.

Another framework that may be used to understand the connection between financial literacy and financial management behavior is Ajzen's Theory of Planned Behavior (TPB) (1991). According to TPB, knowledge is not the only factor that determines behavior; attitude, intention, subjective norms, and perceived behavioral control also play a role. In the MSME context, financial literacy may improve awareness and attitudes toward proper financial management. However, the realization of such behavior depends on entrepreneurs' ability and confidence to apply financial practices in daily business activities. There may be a disconnect between theoretical knowledge of money and its practical use, as shown by the negative correlation observed in this study. This line of reasoning aligns with earlier research that found that, to achieve positive financial results, financial literacy is not enough; one must also have the necessary skills, experience, and behavioral control (Kusumaningrum *et al.*, 2023; Munthay & Sembiring, 2024).

When it comes to financial technology, the results reveal that the use of e-wallets influences the behavior of MSME financial managers in a positive but statistically insignificant way. This suggests that financial technology, despite its efficiency and ease of use, is not currently a good predictor of better financial management practices. With the advent of digital financial services that facilitate company operations, increased accessibility, and faster transaction times, financial technology has revolutionized the financial sector (Kohardinata *et al.*, 2023). However, fintech can only work if MSME operators use it for more than just making payments.

TAM explains the negligible impact of financial technology by showing how perceived utility and ease of use affect adoption (Davis & Venkatesh, 1996). MSME actors may perceive e-wallets as useful and easy to operate. However, their use may remain focused on receiving payments rather than supporting broader financial management functions such as recording, monitoring, and evaluating business finances. Therefore, technology acceptance does not necessarily guarantee effective technology utilization. Digital financial tools can contribute more significantly when entrepreneurs possess sufficient capability to integrate technology into their managerial processes.

This finding is in line with the argument that financial technology adoption requires not only access to digital tools but also adequate financial and digital capability to generate business benefits (Siskawati & Ningtyas, 2022). Similarly, Lestari *et al.*, (2024) emphasize that fintech can support MSME activities by improving efficiency and accessibility, but the impact depends on the intensity and purpose of utilization. In the context of MSMEs, e-wallets may primarily function as transaction facilitators due

to customer preferences and business convenience. At the same time, their potential as financial management instruments has not been fully optimized (Husnayetti *et al.*, 2024).

The results show that the interplay between financial competence, behavioral implementation, and technology deployment shapes MSME financial management behavior. While financial technology facilitates financial operations, financial literacy lays the groundwork for comprehending financial decisions. However, these factors require practical application, financial discipline, and effective managerial routines to create meaningful improvements in MSME financial management practices.

5. Concluding Remarks and Recommendation

In Palu City, Indonesia, this research examines how micro, small, and medium-sized enterprises (MSMEs) manage their financial resources. The results show that financial literacy hinders the financial management of micro, small, and medium-sized enterprises (MSMEs). This shows that knowing money is not enough to make sound financial decisions; one also needs discipline and consistency to put that information into practice. Meanwhile, e-wallets and other financial tech have a small but beneficial impact, suggesting that digital payment tools have not yet made a big dent in improving financial management. These results show that there are more nuanced aspects beyond knowledge and technology adoption that affect MSME financial management. One such factor is the capacity of business actors to turn financial competence into everyday financial behavior effectively.

Results suggest that MSME players could better implement financial literacy by keeping track of their money, creating a budget, managing their cash flow, and keeping their personal and business finances separate. The utilization of financial technology should also be optimized beyond transaction activities by utilizing digital features that support financial monitoring and decision-making. For policymakers and MSME development institutions, financial education programs should emphasize practical training and continuous assistance to bridge the gap between financial knowledge and implementation. To gain a more comprehensive picture of financial management in MSMEs, future studies should incorporate other variables such as financial behavior, digital capabilities, and entrepreneurial traits.

Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Anggraeni, B. D. (2016). Pengaruh tingkat literasi keuangan pemilik usaha terhadap pengelolaan keuangan. Studi kasus: umkm Depok. *Jurnal Vokasi Indonesia*, 3(1), 2.
- Anggriani, I., Armiani, A., & Wahyullah, M. (2023). Pengaruh inklusi keuangan, literasi keuangan, dan pengelolaan keuangan terhadap kinerja UMKM di Kabupaten Dompu. *Kompeten: Jurnal Ilmiah Ekonomi Dan Bisnis*, 2(3), 598–609.

- Ardiansyah, A. F. A., Rauf, A., & Nurman, N. (2022). Pengaruh literasi keuangan terhadap pengelolaan keuangan UMKM di Kota Makassar. *SINOMIKA Journal: Publikasi Ilmiah Bidang Ekonomi dan Akuntansi*, 1(4), 879–890.
- Astuti, M. D., & Soleha, E. (2023). Pengaruh literasi keuangan, inklusi keuangan dan locus of control terhadap pengelolaan keuangan UMKM di Kecamatan Bojongsungu. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, 11(1), 51–64.
- Aulia, F., & Mulyadi, D. (2024). Pengaruh literasi keuangan terhadap pengelolaan keuangan pada usaha mikro, kecil, dan menengah (UMKM) di Karawang. *PENG: Jurnal Ekonomi dan Manajemen*, 1(2), 84–91.
- Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human-Computer Studies*, 45(1), 19–45.
- Fauzi, M. A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in Knowledge Management Studies: Knowledge Sharing in Virtual Communities. *Knowledge Management & E-Learning*, 14(1), 103–124.
- 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.
- Herdjiono, M. V. I., & Damanik, L. A. (2016). Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior. *Jurnal Manajemen Teori Dan Terapan*, 9(3), 226–241.
- Husnayetti, H., Astuti, T. B., & Junarti, J. (2024). The Effectiveness of Fintech in SME Financial Management: A Systematic Literature Review. *American Journal of Economic and Management Business (AJEMB)*, 3(12), 473–482.
- Kodu, S., Moonti, U., Santoso, I. R., & Hafid, R. (2023). Pengaruh Literasi Keuangan terhadap Pengelolaan Keuangan UMKM di Food Court Halal Sabilurasyad Universitas Negeri Gorontalo. *AKSARA: Jurnal Ilmu Pendidikan Nonformal*, 9(1), 437–448.
- Kohardinata, C., Junianto, Y., Widianingsih, L. P., & Talahaturusun, J. A. (2023). *Pengaruh Literasi Teknologi Informasi dan Komunikasi (TIK) terhadap Pinjaman P2P di Indonesia*.
- Kusumaningrum, S. M., Wiyono, G., & Maulida, A. (2023). Pengaruh literasi keuangan, inklusi keuangan, dan sikap keuangan terhadap pengelolaan keuangan UMKM di Kapanewon Godean, Kabupaten Sleman. *Jurnal Samudra Ekonomi Dan Bisnis*, 14(2), 227–238.
- Lestari, L., Setiawati, R., & Utama, A. N. B. (2024). Pengaruh Financial Technology, Literasi Keuangan, dan Financial Self-efficacy terhadap Pengelolaan Keuangan UMK Kuliner di Kota Jambi. *Ekonomis: Journal of Economics and Business*, 8(2), 1584–1592.
- Lusardi, A., Mitchell, O. S., & Curto, V. (2014). Financial literacy and financial sophistication in the older population. *Journal of Pension Economics & Finance*, 13(4), 347–366.
- Mujahidin, A. (2020). Pengaruh fintech e-wallet terhadap perilaku konsumtif pada generasi millennial. *Inovbiz: Jurnal Inovasi Bisnis*, 8(2), 143–150.
- Munthay, S. F., & Sembiring, M. (2024). Pengaruh Literasi Keuangan dan Inklusi Keuangan terhadap Pengelolaan Keuangan UMKM di Kecamatan Kisaran Barat, Kabupaten Asahan. *Owner: Riset Dan Jurnal Akuntansi*, 8(1), 22–35.
- Nufzatutsaniah, Sunardi, N., & Kartono. (2023). Pengelolaan Keuangan Yang Efektif dan Efisien bagi Keuangan Rumah Tangga Masyarakat Cihambulu, Kec. Pabuaran, Kab. Subang, Propinsi Jawa Barat. *Jurnal Abdi Masyarakat Humanis*, 4(2), 66.
- Oktary, D., & Wardhani, F. I. (2023). Pengaruh literasi keuangan dan e-wallet terhadap perilaku konsumtif mahasiswa STIE Indonesia Pontianak. *Jurnal Ekonomi Integra*, 13(1), 11.
- Peter, S., Elangovan, G., & Gupta, A. (2025). Digital engagement in financial inclusion for bridging the gendered entrepreneurial financial gap: evidence from India. *Cogent Business & Management*, 12(1), 2518492.

- Raharjo, K., Dalimunte, N. D., Purnomo, N. A., Zen, M., Rachmi, T. N., & Sunardi, N. (2022). Pemanfaatan Financial Technology dalam Pengelolaan Keuangan pada UMKM di Wilayah Depok. *Jurnal Pengabdian Masyarakat Madani (JPMM)*, 2(1), 67–77.
- Rainnolv, C., & Janrosi, V. S. E. (2025). The Influence of Financial Literacy, Accounting Knowledge, and Fintech Usage on MSME Performance in Batam City. *Finance: International Journal of Management Finance*, 3(2), 94–105.
- Rifqiah, N. N. L., & Pujianto, W. E. (2023). Pemanfaatan Fintech Pada UMKM Sidoarjo. *Dewantara: Jurnal Pendidikan Sosial Humaniora*, 2(3), 52–70.
- Rizky, M., & Fitriyah, H. (2024). Empowering MSMEs through Financial Literacy and Inclusion Drives Success in Indonesia. *Indonesian Journal of Law and Economics Review Учредителю: Universitas Muhammadiyah Sidoarjo*, 19(2).
- Rumbianingrum, W., & Wijayangka, C. (2018). Pengaruh literasi keuangan terhadap pengelolaan keuangan UMKM. *Almana: Jurnal Manajemen Dan Bisnis*, 2(3), 156–164.
- Samekto, A. (2021). *Penerapan Theory of Planned Behaviour pada Penggunaan Payment Gateway oleh UKM di Masa Pandemi COVID-19*. Penerbit NEM.
- Saputra, M. N., Qomariah, N., & Setianingsih, W. E. (2026). Pengaruh Pengetahuan Kewirausahaan, Kemampuan Usaha, Dan Motivasi Usaha Terhadap Keberhasilan Usaha Warung Madura (Studi Kasus Pelaku Usaha Warung Madura Di Kota Jember). *Journal of Business, Management, and Accounting Studies*, 1(1), 176–189.
- Siskawati, E. N., & Ningtyas, M. N. (2022). Literasi keuangan, financial technology dan perilaku keuangan mahasiswa. *DIALEKTIKA: Jurnal Ekonomi dan Ilmu Sosial*, 7(2), 102–113.
- Streukens, S., & Leroi-Werelds, S. (2016). Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. *European Management Journal*, 34(6), 618–632.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.

Corresponding author

Dhea Resthy Ananda can be contacted at: dhearesthy1703@gmail.com

Appendix

Table A1. Combined Loadings and Cross Loadings

Indicator	FL	FT	FM	Type	P-value
X1.1	0.898	-0.057	0.054	Reflective	<0.001
X1.2	0.903	-0.128	0.074	Reflective	<0.001
X1.3	0.906	-0.187	-0.047	Reflective	<0.001
X1.4	0.914	0.041	-0.017	Reflective	<0.001
X1.5	0.907	0.085	-0.036	Reflective	<0.001
X1.6	0.831	0.266	-0.029	Reflective	<0.001
X2.1	-0.316	0.438	0.173	Reflective	<0.001
X2.2	-0.422	0.541	0.146	Reflective	<0.001
X2.3	0.112	0.706	0.035	Reflective	<0.001
X2.4	0.179	0.866	-0.060	Reflective	<0.001
X2.5	0.116	0.875	-0.144	Reflective	<0.001
X2.6	-0.018	0.807	0.018	Reflective	<0.001
X2.7	-0.005	0.864	-0.011	Reflective	<0.001
X2.8	0.074	0.661	-0.010	Reflective	<0.001
Y1	0.100	-0.049	0.908	Reflective	<0.001
Y2	-0.026	0.084	0.895	Reflective	<0.001
Y3	0.073	-0.125	0.877	Reflective	<0.001
Y4	0.189	-0.102	0.904	Reflective	<0.001
Y5	0.730	-0.432	-0.243	Reflective	0.009
Y6	0.711	-0.377	-0.176	Reflective	0.044

Source: Processed by the Researcher (2026)