

THE EFFECT OF FINANCIAL LITERACY, E-WALLET USAGE AND BUSINESS FINANCIAL PLANNING ON MSME FINANCIAL MANAGEMENT IN MEDAN CITY

Ahmad Rivaldo Tarigan^{1*}, Austin Alexander Parhusip²

^{1,2} Management Study Program / Universitas Potensi Utama, Medan, Indonesia

E-mail: rivaldoo094@gmail.com^{1*}

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Abstract

This study aims to determine the effect of financial literacy, e-wallet usage, and business financial planning on the financial management of culinary MSMEs in Medan City, both partially and simultaneously. The sample consisted of 100 respondents selected using purposive sampling. This research employed a quantitative associative method with multiple linear regression analysis, processed using SPSS. The research instrument was tested for validity and reliability, and the regression model met the classical assumption tests (normality, multicollinearity, and heteroscedasticity). The results show that financial literacy has a positive and significant effect on MSME financial management ($\beta = 0.263$; $t = 3.221$; Sig. = 0.002), e-wallet usage has a positive and significant effect ($\beta = 0.192$; $t = 2.615$; Sig. = 0.010), while business financial planning has a positive and significant effect ($\beta = 0.480$; $t = 5.743$; Sig. = 0.000). Simultaneously, the three variables significantly affect MSME financial management ($F = 57.978$; Sig. = 0.000), with an Adjusted R Square of 0.633, indicating the three variables explain 63.3% of the variation in MSME financial management. This study is expected to serve as a reference for MSME actors in improving financial literacy and the utilization of digital payment technology to support better business financial management.

Keywords: Financial Literacy, E-Wallet Usage, Business Financial Planning, MSME Financial Management

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) constitute a key pillar of the Indonesian economy. The strategic role of MSMEs is evident in their vast numbers—exceeding 64 million business units—their contribution of approximately 60 percent to the Gross Domestic Product (GDP), and their capacity to absorb around 96 to 97 percent of the national workforce (Baderi, 2025). These data demonstrate that MSMEs serve not only as drivers of community economic activity but also as a primary support for national economic stability and growth. Consequently, MSMEs play a vital role in strengthening the national economic structure while fostering sustainable economic development. Beyond contributing to national economic growth, MSMEs play a significant role in fostering equitable economic distribution down to the regional level. Operating across diverse business sectors and reaching broad segments of society, MSMEs create employment opportunities, boost production activities, and help raise public income. In this context, MSMEs are viewed not merely as small-scale business units, but as the foundation of a people-centered economy—one that demonstrates considerable resilience in the face of economic fluctuations.

The number of MSMEs in Medan City has shown a consistent and significant upward trend over the past five years. According to data from the Medan City Statistics Agency, there were 10,235 MSME units recorded in 2020. This figure rose to 12,457 units in 2021, reflecting a recovery in local business activity following the impact of the COVID-19 pandemic the previous year. Growth continued in 2022, with the number of MSME units reaching 15,953. The most significant growth occurred in 2023, when the number of MSMEs in Medan City surged to 40,267 units—more than double the figure from the previous year. This spike indicates a massive acceleration in local business growth, driven by improving regional economic conditions and rising public interest in entrepreneurship. In 2024, the number of MSMEs in Medan City increased further to 46,807 units, marking the highest figure recorded during the period under review. The year-on-year increase in the number of MSMEs in Medan demonstrates that the

city possesses an increasingly thriving and dynamic business ecosystem. This growth reflects Medan's role as an economic hub in North Sumatra, capable of fostering the sustainable emergence of new entrepreneurs. At the same time, the rapid expansion of the MSME sector necessitates improved business management—particularly regarding financial management—to ensure that these enterprises not only grow in number but also enhance their quality and maintain long-term viability.

The number of culinary MSMEs under the city's guidance program in Medan showed a steadily rising trend from 2020 to 2025, growing from 708 units in 2020 to 1,284 units in 2025—nearly doubling over the six-year period. Increases occurred annually, with particularly rapid growth between 2020 and 2022 and a renewed rise in 2024. This reflects the fact that the culinary sector is one of the most popular business fields among Medan residents and serves as a key driver of the local economy. However, a closer look reveals that the growth rate began to slow in 2025, with an increase of only 10 units compared to the previous year. This situation indicates that a quantitative rise in the number of MSMEs is not always matched by the business owners' ability to ensure their long-term viability. Financial management is a critical factor in MSME sustainability. Effective financial management enables business owners to manage income and expenses, separate personal and business finances, create financial plans, and make sound business decisions. Thus, amidst the continued growth of culinary MSMEs, sound financial management is crucial; it ensures that these businesses do not merely increase in number but also improve in quality and survive in the long run.

Limited financial management capacity is one of the reasons why MSMEs have restricted access to bank credit (Mu'as, 2024). To address this, Bank Indonesia developed SIAPIK as a digital financial recording tool. SIAPIK—an acronym for **Sistem Informasi Aplikasi Pencatatan Informasi Keuangan** (Financial Information Recording Application System)—is a digital application designed to help MSMEs record transactions and prepare financial statements in a manner that is easier, simpler, and standardized, thereby supporting improved access to financing. The phenomenon of weak financial management among MSMEs in Medan City is reflected in the various efforts undertaken by the city government to address this issue. In 2023, the Medan City Government partnered with Paper.id—a business financial digitalization platform—to provide its paid package (Paper+) free of charge to 20,000 local MSMEs. This initiative aims to encourage the adoption of digital business management practices, specifically regarding invoicing, record-keeping, financial reporting, and payment processing across all business transactions. The implementation of such a large-scale program demonstrates that financial record-keeping and management remain significant challenges for the majority of MSMEs, necessitating targeted interventions to ensure their businesses are managed in a more organized and sustainable manner.

On the other hand, the sheer number of MSMEs in Medan City is substantial. Data from the Medan City Office of Cooperatives, SMEs, Industry, and Trade indicates that 38,343 MSMEs are registered in the city's Cooperative and MSME Data Collection System (SIMDAKOP). However, of this total, only 1,346 MSMEs had received direct guidance from the agency by the end of 2025. This disparity reveals that the vast majority of MSMEs in Medan City have not yet benefited from direct support programs, particularly regarding the strengthening of business financial management. This situation highlights a gap between the rapid growth in the number of MSMEs and the quality of their business management, specifically financial management. Given the large number of business operators and the strong push for financial digitalization, an MSME's ability to prepare budgets, record transactions, compile simple financial statements, and separate personal from business finances is a critical factor determining business sustainability. It is for this reason that financial management has been identified as a key issue for further examination in this study.

The adoption of e-wallets among MSMEs has shown a steadily rising trend over the years. A 2022 survey by CORE Indonesia involving 2,001 MSMEs revealed that 73% of them conducted transactions using e-wallets more frequently than cash. This indicates that e-wallets have become an integral part of daily business transactions, mirroring the growing consumer familiarity with digital payments. This positive trend extends beyond transaction frequency to impact business performance. In 2023, as cited by the Ministry of Finance's Directorate General of Treasury, 70% of e-wallet-using MSMEs experienced an increase in transaction volume and a 27% to 30% rise in monthly revenue. These findings demonstrate that e-wallet adoption has the potential to drive revenue growth for MSMEs, rather than merely simplifying the payment process. Recognizing this immense potential, the government has set a target to accelerate the digitalization of MSMEs. The Ministry of Cooperatives and SMEs aims for 30 million MSMEs to go digital by 2024, a goal that encompasses the adoption of various digital financial services, including e-wallets. This target underscores that digital transformation—particularly regarding payments—is a key priority in strengthening the competitiveness of national MSMEs.

By 2025, e-wallets have further solidified their position as a primary payment method for the public. A May 2025 JakPat Fintech Trends survey revealed that 80% of respondents use e-wallets for daily transactions, including purchases from MSMEs. This high figure indicates that digital payments have become deeply ingrained in consumer behavior, compelling MSMEs to offer digital payment channels to remain competitive. A similar phenomenon is observed at the regional level, particularly in North Sumatra, the focus of this study. By 2025, approximately 1.4 million MSMEs in North Sumatra—including those in Medan City—had registered for and adopted QRIS as a digital payment channel, typically accessed via e-wallets. The North Sumatra Cooperative and SME Agency has even set a target of increasing the number of QRIS-using MSMEs to 2 million by that year. These data indicate that the adoption of digital payments among MSMEs in North Sumatra is occurring on a massive scale, aligning with national trends.

This illustrates the capital structure of MSMEs in Medan, which is dominated by personal capital (43%) and loans from family (33%). Formal sources, such as *Kredit Usaha Rakyat* (KUR) or banks, account for only 16%, while investment from investors or venture capital is minimal (8%). This pattern highlights the limited access Medan's MSMEs have to institutional financing, a situation consistent with local financial literacy indices that have remained stagnant in the 31.50%–49% range (OJK, 2022; Medan Cooperative Agency, 2023). The heavy reliance on internal capital reflects a preference for low risk—stemming from a lack of understanding regarding formal credit procedures and collateral requirements—as revealed by the study's field survey. Based on the preceding discussion, there is a gap between the demands of modern business development and the readiness of MSME operators regarding financial management and the adoption of digital payments. Many MSME operators lack adequate financial literacy, do not utilize e-wallets optimally, and fail to engage in systematic business financial planning. Therefore, this study is crucial for gaining empirical insight into the impact of financial literacy, e-wallet usage, and business financial planning on the financial management of MSMEs in the culinary sector in Medan City.

Based on the background information presented, several issues can be identified as follows:

1. Financial management among culinary MSMEs in Medan City remains suboptimal. Pre-survey results indicate that 60% of respondents lack a budget or plan for business fund allocation, 47% do not routinely record income and expenses, 70% do not prepare business financial reports, and 63% do not separate personal funds from business funds.
2. Financial literacy among culinary MSME operators in Medan City requires improvement. Pre-survey results show that 40% of respondents do not understand how to manage business income, expenses, capital, and profits; 47% do not understand the use of savings and loans to support business activities; and 53% do not understand the importance of investment or capital allocation for business development.
3. The use of e-wallets among culinary MSME operators in Medan City is suboptimal. Pre-survey results reveal that 57% of respondents have not experienced the benefits of e-wallets in making business transactions more convenient, 60% do not find e-wallets easy to use, 60% do not feel secure using e-wallets for business transactions, and 67% do not believe that e-wallet services effectively facilitate business transactions.
4. Business financial planning among culinary MSME operators in Medan City is relatively low. Based on pre-survey results, 73% of respondents have not prepared a business budget plan, 77% have not managed cash inflows and outflows, 67% have not prioritized the use of revenue or capital, 80% have not planned for long-term capital needs, and 70% have not periodically evaluated their business's financial condition.
5. There is a lack of research simultaneously examining the influence of financial literacy, e-wallet usage, and business financial planning on the financial management of culinary MSMEs in Medan City. Therefore, this study needs to be conducted to determine the extent to which these three variables influence the financial management of MSMEs.

The hypotheses in this study are as follows:

H1: Financial literacy has a positive and significant effect on the financial management of culinary MSMEs in Medan City.

H2: E-wallet usage has a positive and significant effect on the financial management of culinary MSMEs in Medan City.

H3: Business financial planning has a positive and significant effect on the financial management of culinary MSMEs in Medan City.

H4: Financial literacy, e-wallet usage, and business financial planning simultaneously have a positive and significant effect on the financial management of culinary MSMEs in Medan City.

METHOD

This study employs a quantitative research method, utilizing both primary and secondary data. The research was conducted in Medan City, North Sumatra Province, focusing on Micro, Small, and Medium Enterprises (MSMEs) operating in the culinary sector. Medan City was selected as the research site because it is a major metropolitan area and economic hub in North Sumatra, characterized by a substantial number of MSMEs and high levels of economic activity. The study was carried out from late March 2026 to July 2026. Based on 2025 data regarding culinary MSMEs supported by the Department of Cooperatives, SMEs, Industry, and Trade (Dinas Kopukmperindag), there were 1,284 registered culinary MSMEs in Medan City. This specific focus was chosen because the culinary sector is one of the most common fields for MSMEs and involves high-intensity financial transactions, making it highly relevant to research on financial literacy, e-wallet usage, and business financial planning in the context of MSME financial management. Consequently, the study population consists of culinary MSMEs in Medan City that operate under the guidance of the Medan City Department of Cooperatives. The sample size was determined using the Slovin formula with a 10% margin of error, as follows:

Slovin Formula's:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{1.284}{1 + 1.284(0,1)^2}$$

Hasil:

$$n \approx 92,77$$

n : Sample size

N : Population size

e : Margin of error (error tolerance)

Based on the population of MSMEs registered as mentees of the Cooperative Agency in Medan City—totaling 1,284 business units—the sample calculation is as follows: Based on this calculation, the sample size for this study was rounded to 100 respondents, specifically MSME operators in the culinary sector in Medan City. The sample distribution for this study focuses on the culinary MSME sector. Given the absence of detailed data regarding the number of MSMEs in each specific sector, the researcher distributed the sample size proportionally and evenly to ensure representation across the sectors included in the study. This distribution was implemented to obtain a more representative overview of the influence of financial literacy, e-wallet usage, and business financial planning on MSME financial management within these sectors. This study employs a non-probability sampling technique, specifically purposive sampling.

The criteria used to determine the sample for this study are as follows:

1. MSME operators active in the culinary sector and located in Medan City.
2. Businesses that have been operational for at least one year, based on the premise that the operators possess experience in managing their business finances.
3. Business operators who utilize e-wallets for business transactions, whether for receiving consumer payments or for other cashless transaction purposes.
4. Willingness to participate as a respondent and to complete the questionnaire fully and honestly, reflecting actual business conditions.

Based on these criteria, the researcher screened potential respondents during the questionnaire administration process to ensure that only MSME operators meeting all the aforementioned criteria were included in the study sample; this ensures that the data obtained is genuinely relevant to the research objectives regarding the impact of financial literacy, e-wallet usage, and business financial planning on MSME financial management.

RESULTS AND DISCUSSION

Results

Validity and Reliability Test Results

Table 1. Results of the Validity Test of Financial Literacy, E-Wallet Usage, Business Financial Planning and MSME Financial Management

Statement Item	r-count	r-table	Description
FL1	0.943	0,361	Valid
FL2	0.906	0,361	Valid
FL3	0.906	0,361	Valid
FL4	0.872	0,361	Valid
FL5	0.846	0,361	Valid
FL6	0.878	0,361	Valid
EWU1	0.920	0,361	Valid
EWU2	0.914	0,361	Valid
EWU3	0.938	0,361	Valid
EWU4	0.920	0,361	Valid
EWU5	0.899	0,361	Valid
EWU6	0.878	0,361	Valid
EWU7	0.902	0,361	Valid
EWU8	0.928	0,361	Valid
BFP1	0.923	0,361	Valid
BFP2	0.875	0,361	Valid
BFP3	0.915	0,361	Valid
BFP4	0.878	0,361	Valid
BFP5	0.894	0,361	Valid
BFP6	0.834	0,361	Valid
BFP7	0.904	0,361	Valid
BFP8	0.947	0,361	Valid
BFP9	0.869	0,361	Valid
BFP10	0.925	0,361	Valid
MF1	0.905	0,361	Valid
MF2	0.882	0,361	Valid
MF3	0.916	0,361	Valid
MF4	0.899	0,361	Valid
MF5	0.887	0,361	Valid
MF6	0.869	0,361	Valid
MF7	0.935	0,361	Valid

Source: SPSS version 25 (2026)

Referring to Table 1, it is known that the corrected item total correlation value is > 0.361 , so all statement items are stated to be valid/legitimate.

Table 2. Results of the Reliability Test of Financial Literacy, E-Wallet Usage, Business Financial Planning and MSME Financial Management

Variable	Cronbach Alpha	Description
Financial Literacy	0.948	Reliable
E-Wallet Usage	0.971	Reliable
Business Financial Planning	0.973	Reliable
MSME Financial Management	0.967	Reliable

Source: SPSS version 25 (2026)

Referring to Table 2, it is known that the Cronbach's alpha value for all variables is > 0.60 , so all variables is financial literacy, e-wallet usage, business financial planning and msme financial management are stated to be reliable.

Normality Test Results

Table 3. Kolmogorov-Smirnov Test Results

			Unstandardized Residual
N			100
Normal Parameters ^{a,b}	Mean		.0000000
	Std. Deviation		.88516935
Most Extreme Differences	Absolute		.071
	Positive		.056
	Negative		-.071
Test Statistic			.071
Asymp. Sig. (2-tailed)			.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS version 25 (2026)

Referring to Table 3. above, it is known that the results of the Kolmogorov-Smirnov test have a significance value of $0.200 > 0.05$ so it can be concluded that the data tested is normally distributed.

Multicollinearity Test Results (Tolerance and VIF)

Table 4. Multicollinearity Test Results

Coefficients ^a							
		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	1,955	2,574		0,759	0,450	
	Financial Literacy	0,302	0,094	0,263	3,221	0,002	0,554 1,806
	E-Wallet Usage	0,188	0,072	0,192	2,615	0,010	0,687 1,456
	Business Finacial Planning	0,420	0,073	0,480	5,743	0,000	0,531 1,882

a. Dependent Variable: MSME Financial Management

Source: SPSS version 25 (2026)

Referring to Table 4. it is known that the results of the multicollinearity test for the variables financial literacy, e-wallet usage, business financial planning have a tolerance value > 0.10 and $VIF < 10$, so this study is declared free from multicollinearity problems.

Heteroscedasticity Test Results (Glejser)

Table 5. Glejser Heteroscedasticity Test Results

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4,427	1,579		2,804	0,006
	Financial Literacy	-0,050	0,058	-0,115	-0,866	0,389
	E-Wallet Usage	-0,033	0,044	-0,090	-0,755	0,452
	Business Finacial Planning	-0,028	0,045	-0,085	-0,628	0,532

a. Dependent Variable: Abs res

Source: SPSS version 25 (2026)

Referring to Table 5. above, the results of the Glejser test above, the significance value of the three independent variables is > 0.05 , so it can be concluded that there is no heteroscedasticity.

Multiple Linear Regression Test Results

Table 6. Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1,955	2,574			0,759	0,450
Financial Literacy	0,302	0,094	0,263		3,221	0,002
E-Wallet Usage	0,188	0,072	0,192		2,615	0,010
Business Financial Planning	0,420	0,073	0,480		5,743	0,000

Source: SPSS version 25 (2026)

Referring to Table 6. the regression equation for the above values is:

$$Y = 1,955 + 0,302 X_1 + 0,188 X_2 + 0,420 X_3 + e$$

1. The constant value of 1.955 indicates that if the variables Financial Literacy (X1), E-Wallet Usage (X2), and Business Financial Planning (X3) are zero or remain unchanged, the value of MSME Financial Management (Y) is 1.955.
2. The regression coefficient for X1 is 0.302 (positive), meaning that every one-unit increase in Financial Literacy will increase MSME Financial Management by 0.302 units, assuming other variables remain constant (*ceteris paribus*).
3. The regression coefficient for X2 is 0.188 (positive), meaning that every one-unit increase in E-Wallet Usage will increase MSME Financial Management by 0.188 units, assuming other variables remain constant (*ceteris paribus*).
4. The regression coefficient for X3 is 0.420 (positive), meaning that every one-unit increase in Business Financial Planning will increase MSME Financial Management by 0.420 units, assuming other variables remain constant (*ceteris paribus*).

Hypothesis Testing

Partial Test Results (t-Test)

Table 7. Partial Test Results (t-Test)

Model	Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations	
	B	Std. Error	Beta				Zero-order	Partial
1 (Constant)	1,955	2,574			0,759	0,450		
Financial Literacy	0,302	0,094	0,263		3,221	0,002	0,666	0,312
E-Wallet Usage	0,188	0,072	0,192		2,615	0,010	0,571	0,258
Business Financial Planning	0,420	0,073	0,480		5,743	0,000	0,749	0,506

a. Dependent Variable: MSME Financial Management

Source: SPSS version 25 (2026)

Referring to Table 7, it is known that the independent variables influence each other on the dependent variable.

1. The Financial Literacy variable (X1) has a positive regression coefficient (B) of 0.302, with a calculated t-value of 3.221 and a significance value of 0.002. Since the regression coefficient is positive and the significance value is < 0.05 , H1 is accepted, meaning that Financial Literacy has a positive and significant effect on MSME financial management.
2. The E-Wallet Usage variable (X2) has a positive regression coefficient (B) of 0.188, with a calculated t-value of 2.615 and a significance value of 0.010. Since the regression coefficient is positive and the significance value is < 0.05 , H2 is accepted, meaning that E-Wallet Usage has a positive and significant effect on MSME financial management.

3. The Business Financial Planning variable (X3) has a positive regression coefficient (B) of 0.420, with a calculated t-value of 5.743 and a significance value of 0.000. Since the regression coefficient is positive and the significance value is < 0.05 , H3 is accepted, meaning that Business Financial Planning has a positive and significant effect on MSME financial management.

To determine the magnitude of the contribution of each independent variable to the dependent variable, calculations were performed using the formula: $\beta \times \text{Zero-order correlation}$. Here, β represents the standardized coefficient, while the zero-order correlation refers to the simple (bivariate) correlation between each independent variable and the dependent variable, without controlling for other variables. The calculations to determine the influence or partial contribution value of each independent variable are as follows:

1. Financial Literacy = $0.263 \times 0.666 \times 100\% = 0.175$ or 17.5%
2. E-Wallet Usage = $0.192 \times 0.571 \times 100\% = 0.110$ or 11%
3. Business Financial Planning = $0.480 \times 0.749 \times 100\% = 0.359$ or 35.9%

Based on the calculations above, the largest contribution comes from the Business Financial Planning variable (X3) at 36%. This indicates that business financial planning makes a significant contribution to the financial management of MSMEs in the culinary sector in Medan City.

Simultaneous Test Results (F-Test)

Table 8. Simultaneous Test Results (F-Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	140,541	3	46,847	57,978	.000 ^b
	Residual	77,569	96	0,808		
	Total	218,110	99			

a. Dependent Variable: MSME Financial Management

b. Predictors: (Constant), Financial literacy, e-wallet usage, business financial planning

Source: SPSS version 25 (2026)

Based on the F-test results above, a calculated F-value of 57.978 was obtained, with a significance value of 0.000. Since the significance value is less than 0.05, H4 is accepted; this indicates that Financial Literacy, E-Wallet Usage, and Business Financial Planning simultaneously (collectively) have a positive and significant effect on MSME financial management.

Determination Test Results

Table 9. Determination Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803 ^a	0,644	0,633	0,89889

a. Predictors: (Constant), Financial literacy, e-wallet usage, business financial planning

Source: SPSS version 25 (2026)

Based on the determination test results in Table 9 above, the Adjusted R-squared value is 0.633; this indicates that 63.3% of the variation in the financial management of culinary MSMEs in Medan City can be explained by financial literacy, e-wallet usage, and business financial planning. Meanwhile, the remaining 36.7% is attributable to other variables not examined in this study.

Discussion

The Effect of the Financial Literacy on MSME Financial Management

The testing of the first hypothesis (H1) in this study was conducted to determine whether Financial Literacy has a partial effect on MSME Financial Management. This analysis employed the t-test (partial test) based on the following decision criteria: if the calculated t-value exceeds the t-table value and the significance value is less than 0.05, then H0 is rejected and Ha is accepted, indicating that the independent variable has a significant effect on the dependent variable. Conversely, if the calculated t-value is less than the t-table value and the significance value exceeds 0.05, then H0 is accepted and Ha is rejected, indicating that the independent variable does not have a significant effect on the dependent variable. Based on the data analysis results, the calculated t-value for the Financial

Literacy variable was 3.221, with a significance value of 0.002. The t-table value at degrees of freedom ($df = n - k - 1 = 100 - 3 - 1 = 96$), with a 5% two-tailed significance level, was 1.985. Thus, the calculated t-value (3.221) is greater than the t-table value (1.985), and the significance value (0.002) is less than 0.05. Both testing criteria were met; therefore, it can be concluded that H_0 is rejected and H_1 is accepted.

This means that Financial Literacy is statistically proven to have a positive and significant effect on MSME Financial Management among culinary business owners supported by the Medan City Cooperative and Trade Agency. These research results are consistent with findings presented by Artha and Wibowo (2023) and Pusporini (2020), both of which also found that financial literacy and financial planning have a positive and significant effect on financial management. This consistency reinforces the external validity of the research findings and demonstrates that the positive relationship between financial literacy and financial management tends to be robust across various research contexts, persisting even when examined with different subjects, locations, and time periods. However, these results differ from the findings of Nurlia and Irdawati (2025) and Wulansari (2022), who reported that financial literacy did not significantly influence financial management; instead, they found that human resource (HR) management factors played a more dominant role in financial management within their respective study subjects. This discrepancy warrants further discussion, given that while those studies also addressed the theme of financial literacy, they reached conclusions that stand in stark contrast to the findings of the present study.

The Effect of the E-Wallet Usage on MSME Financial Management

Hypothesis testing for the second hypothesis (H_2) was conducted to determine whether E-Wallet usage has a partial effect on MSME financial management. The decision-making criteria were identical to those used for the first hypothesis: comparing the calculated t-value with the t-table value and assessing the significance level against a threshold of 0.05. Data analysis revealed a calculated t-value of 2.615 and a significance value of 0.010 for the E-Wallet usage variable. Given a t-table value of 1.985 (at $df = 96$ and a 5% two-tailed significance level), the calculated t-value (2.615) exceeded the t-table value (1.985), and the significance value (0.010) was below 0.05. Consequently, the null hypothesis (H_0) was rejected and H_2 was accepted, indicating that E-Wallet usage has a statistically significant positive effect on MSME financial management. Although the calculated t-value for E-Wallet usage (2.615) was the lowest among the three independent variables in this study, it remained well above the t-table threshold, confirming the statistical significance of the effect. The acceptance of H_2 demonstrates a tangible link between the adoption of digital payment technologies—specifically e-wallets—by culinary MSME operators and the quality of their business financial management.

These results are consistent with the findings of Zada and Sopiana (2021), who stated that e-wallet usage positively affects transaction efficiency and financial record-keeping. The findings also align with those of Widodo and Sudarno (2024) and Aflagaly, Kusumowati, and Listyowati (2025), who found that the ease of using e-wallets has a significant positive impact on financial management behavior. The consistency of results across these three prior studies—conducted in different locations, with different subjects, and over different time periods—strengthens the empirical evidence that the adoption of digital payment technology generally has a positive impact on the financial management of micro, small, and medium-sized enterprises (MSMEs). In contrast to the findings regarding the Financial Literacy variable, no prior studies were found that significantly contradict the results concerning the E-Wallet Usage variable; thus, it can be stated that the findings regarding the positive influence of e-wallet usage on financial management appear consistent across the various research contexts studied. Based on these findings, several practical implications can be formulated. For e-wallet service providers, it is crucial to continuously enhance system reliability, transaction security, and after-sales service, given that the "Trust" indicator received the lowest score relative to the others. Increasing transparency regarding data and fund security mechanisms could serve as a strategic step to bolster the trust of MSME operators.

Culinary MSME operators in Medan are encouraged to further optimize the use of automated recording features within e-wallet applications as part of efforts to achieve more organized business financial management; while the benefits of transaction speed have been clearly realized, the utilization of digital financial recording features still offers room for further optimization. For the government and relevant institutions, these research findings can serve as a basis for promoting awareness and education programs regarding digital transaction security for MSME operators, thereby enhancing their sense of security and trust in using e-wallets for business financial management.

The Effect of the Business Financial Planning on MSME Financial Management

Hypothesis testing for H3 was conducted to determine whether Business Financial Planning has a partial effect on MSME Financial Management, utilizing the same decision-making criteria as the two previous hypothesis tests. Data analysis results show a calculated t-value of 5.743 for the Business Financial Planning variable, with a significance value of 0.000. This calculated t-value is the highest among the three independent variables in this study, far exceeding the t-table value of 1.985 ($df = 96$, 5% significance level, two-tailed), with a significance value of 0.000, which is well below 0.05. Consequently, H_0 is rejected and H_3 is accepted, indicating that Business Financial Planning is statistically proven to have a positive and significant effect on MSME Financial Management. The magnitude of the calculated t-value for this variable—nearly double that of Financial Literacy (3.221) and more than double that of E-Wallet Usage (2.615)—indicates that the relationship between Business Financial Planning and MSME Financial Management is the strongest and most statistically consistent among the three independent variables examined. The unstandardized regression coefficient (B) for the Business Financial Planning variable is 0.420, representing the highest B-value among the three independent variables. The positive sign of this coefficient indicates a direct relationship, meaning that every one-unit increase in the Business Financial Planning score results in a 0.420-unit increase in the MSME Financial Management score, assuming the Financial Literacy and E-Wallet Usage variables remain constant.

These research results are consistent with the findings of Artha and Wibowo (2023), who stated that financial planning has a positive and significant effect on financial management. This consistency further reinforces the validity of the research findings, particularly given that the study by Artha and Wibowo (2023)—which also supports the positive impact of financial literacy—serves as a consistent reference point; this indicates a coherent pattern underscoring the simultaneous importance of financial knowledge and financial planning. However, these results differ from the findings of Yudianto (2023), who reported no significant influence of financial planning on financial management. This discrepancy is noteworthy, especially since the present study identifies business financial planning as the variable with the most dominant influence. There are several possible explanations for the divergence from Yudianto's (2023) findings. First, there are differences in the characteristics and scale of the businesses studied. If Yudianto's (2023) research involved businesses of a different scale or operated in sectors with more stable and predictable cash flow characteristics, the need for formal financial planning might be less critical than in the culinary sector, which tends to be more volatile and requires frequent plan adjustments.

The simultaneous effect of the Financial Literacy, E-Wallet Usage and Business Financial Planning on MSME Financial Management

The fourth hypothesis (H_4) was tested to determine whether Financial Literacy, E-Wallet Usage, and Business Financial Planning collectively (simultaneously) influence MSME Financial Management. This assessment employed the F-test, based on the following decision criteria: if the calculated F-value exceeds the F-table value and the significance level is less than 0.05, then H_0 is rejected and H_a is accepted, indicating that the independent variables collectively exert a significant influence on the dependent variable. Data analysis yielded a calculated F-value of 57.978 with a significance level of 0.000. The F-table value for $df_1 = k = 3$ and $df_2 = n - k - 1 = 96$ at a 5% significance level is 2.699. Consequently, the calculated F-value (57.978) is substantially higher than the F-table value (2.699), and the significance level (0.000) is well below 0.05. Both testing criteria were convincingly met; thus, it is concluded that H_0 is rejected and H_4 is accepted. This means that Financial Literacy, E-Wallet Usage, and Business Financial Planning have been proven to collectively (simultaneously) exert a significant influence on the financial management of MSMEs in the culinary sector in Medan City. The magnitude of the calculated F-value—far exceeding the F-table value (by more than twenty-fold)—demonstrates that the regression model developed in this study possesses a very high level of confidence in explaining the collective relationship between the three independent variables and the dependent variable, indicating that the result did not occur by chance.

To complement the simultaneous test results, an analysis of the coefficient of determination was also conducted to determine the extent of the collective contribution of the three independent variables in explaining the variation in the dependent variable. The test results show an R-squared value of 0.644, indicating that 64.4% of the variation in MSME financial management can be jointly explained by financial literacy, e-wallet usage, and business financial planning, while the remaining 35.6% is explained by variables outside this research model. The Adjusted R-squared value—which accounts for the number of independent variables in the model to avoid bias resulting from the inclusion of irrelevant variables—is 0.633, or 63.3%. The fact that the Adjusted R-squared value differs from the R-squared value by only about one percentage point indicates that the three independent variables in this model are relevant and make a substantive contribution, rather than merely inflating the R-squared value artificially. A

coefficient of determination ranging from 63.3% to 64.4% is considered high for research in the social and behavioral sciences, a field typically involving numerous external factors that influence the dependent variable but are difficult to measure quantitatively.

CONCLUSION

Based on the research results, it can be concluded that:

1. Financial literacy has a positive and significant effect on the financial management of MSMEs in the culinary sector in Medan City.
2. E-wallet usage has a positive and significant effect on the financial management of MSMEs in the culinary sector in Medan City.
3. Business financial planning has a positive and significant effect on the financial management of MSMEs in the culinary sector in Medan City.
4. Financial literacy, e-wallet usage, and business financial planning simultaneously have a significant effect on the financial management of MSMEs in the culinary sector in Medan City.

Based on the conclusions outlined above, the author offers the following recommendations:

1. Regarding financial literacy, business owners are advised to improve their ability to calculate business profits systematically and to separate business revenue, expenses, and profits through routine record-keeping.
2. Regarding the use of e-wallets, business owners are advised to optimize e-wallets not only as payment tools but also as a means of recording transactions, while also exercising greater caution regarding the security and reliability of service providers.
3. Regarding business financial planning, business owners need to improve planning for financial targets, capital requirements, and long-term funding sources, as well as conduct periodic financial evaluations.
4. Business owners are also advised to conduct periodic financial evaluations by comparing actual results against the prepared budget plan. Such evaluations can be carried out by comparing actual revenue and expenses with established targets, monitoring weekly or monthly cash flow, and maintaining simple records of business profit and loss.

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