Electronic Journal of Education, Social Economics and Technology
Vol. 6, No. 2, (2025), pp. 1~7, Article ID: 781
ISSN 2723-6250 (online)
DOI: https://doi.org/10.33122/ejeset.v6i2.781

SAINTIS publishing

Research Article

The Influence of Financial Literacy, Financial Technology, and Financial Inclusion on The Financial Performance of SMEs in the Services and Trade Sectors in Pontianak City

Iva Nurfazrina*, and Edy Suryadi

Universitas Muhammadiyah Pontianak, Pontianak, Indonesia, 78123
*Corresponding Author: 211310042@unmuhpnk.ac.id | Phone: +6289685557073

ABSTRACT

This study aims to analyze the influence of financial literacy, financial technology, and financial inclusion on the financial performance of SMEs in the service and trade sectors in Pontianak City. The background of this research lies in the importance of financial literacy and inclusion in improving business sustainability, as well as the limited utilization of financial technology among SME actors. This research employs an associative method with a quantitative approach. The population consists of all SMEs in the service and trade sectors in Pontianak City, totaling 2,218 units. A sample of 150 respondents was selected using proportionate stratified random sampling. Data were collected through questionnaires and analyzed using validity and reliability tests, classical assumption tests, multiple linear regression analysis, t-test, and F-test. The results of the F-test indicate that financial literacy, financial technology, and financial inclusion simultaneously have a significant effect on financial performance. The t-test results show that financial literacy and financial inclusion have a positive and significant partial effect on financial performance, while financial technology does not have a significant influence. The coefficient of determination (R^2) is 0.071, indicating that the three independent variables explain only 7.1% of the variation in financial performance, while the remaining 92.9% is influenced by other variables not examined in this study. These findings highlight the importance of strengthening financial literacy and inclusion among SME actors to enhance their financial performance. Meanwhile, the use of financial technology still requires optimization through proper education and guidance.

Keywords: Financial Literacy; Financial Technology; Financial Inclusion; Financial Performence

1. INTRODUCTION

In today's era of digital commerce and free trade systems, the role of the private sector has increased significantly in many developing countries. According to Law No. 20 of 2008 concerning Micro, Small, and Medium Enterprises (MSMEs), these are defined as productive economic businesses that stand independently, operated by individuals or business entities not affiliated as subsidiaries or branches of medium or large enterprises, either directly or indirectly. MSMEs are classified based on various criteria such as the number of employees, sales or revenue, and the value of assets or capital. The classification standards may vary depending on the sector or industry in which the business operates. Based on data from the Ministry of Cooperatives and MSMEs, Indonesia recorded 65.4 million MSMEs in 2019. These enterprises employed approximately 123.3 thousand workers, demonstrating the substantial impact and contribution of MSMEs in reducing unemployment in the country. This positive trend is expected to support national economic growth. As of September 30, 2023, there were 43,247 MSMEs registered in West Kalimantan. In the service and trade sectors in Pontianak City alone, there are 2,000 MSMEs, consisting of 200 small-scale enterprises and 18 medium-scale enterprises as of 2023.

Financial literacy, as mandated by the Financial Services Authority (OJK), is a strategic effort to enhance the quality of financial decision-making and financial management through knowledge, skills, and confidence to achieve financial well-being. According to Dayanti et al. (2020), financial literacy is the ability to understand financial conditions and concepts and to apply that knowledge accurately in behavior. The goal is to equip society with appropriate financial education so that individuals can position themselves wisely and make sound financial decisions. Financial literacy is crucial in enabling individuals to manage their income and resources more effectively (Hanasri et al., 2023). FinTech, short for financial technology, represents a major revolution in the financial industry, transforming how financial services operate and steering financial management into a new direction. Financial technology refers to the modernization of traditionally executed

financial transactions by integrating digital technologies, thereby improving efficiency in terms of time and location (Hasyim & Hasibuan, 2022). It enables financial activities to be conducted without physical cash (Syahrani & Pradesa, 2023). This phenomenon has significantly changed how people manage finances, invest, and transact. By streamlining processes, enhancing accessibility, and creating new opportunities, FinTech brings modern technology into the financial world. Previously complex and time-consuming tasks like payments, fund transfers, and stock purchases have now become simpler. Essentially, financial technology is a service system that leverages technological advancements (Safrianti et al., 2022).

According to the Financial Services Authority Regulation No. 76/POJK 07/2017, financial inclusion refers to the availability of access to various financial institutions, products, and services tailored to the needs and capabilities of the population. Kusumaningrum et al. (2023) define financial inclusion as a condition where every individual has smooth access to high-quality formal financial products and services at affordable costs. The objectives of financial inclusion include improving public access to financial institutions, increasing the availability of products and services offered by Financial Service Providers (PUJK), encouraging the use of such services, and improving the quality of their utilization in line with people's needs and capacities (Soetiono, 2017). In the current digital era, the service sector plays a critical and strategic role in the economic development of a country. Services shape corporate image and enhance customer trust and loyalty. On the other hand, the trade sector also relies heavily on financial performance, as businesses require accurate financial tracking to assess their financial condition periodically, in terms of both fundraising and fund allocation. Financial performance refers to a formal effort to evaluate a company's efficiency and effectiveness in generating profits and maintaining cash flow. According to Putri et al. (2024), sound financial performance indicates that an MSME can generate stable profits, manage debt responsibly, and maintain a strong financial position.

Financial performance is the outcome of activities performed with the available financial resources and can be measured through asset growth (Nopiyani & Indiani, 2023). The Medium-Term Regional Development Plan (RPJMD) of Pontianak City for 2020–2024 outlines a goal to improve public welfare, self-reliance, creativity, and competitiveness through increased financial literacy and access to financial services in support of inclusive and equitable economic development. Therefore, the financial system should create broader opportunities for entrepreneurs to carry out economic transactions and serve as the backbone of the economy. The advancement of financial technology offers vast opportunities for MSMEs, especially in West Kalimantan, to manage their businesses more efficiently through digital solutions. HiBank, as a digital financial platform, plays a role in strengthening the MSME ecosystem by providing financing services and access to capital. Collaboration between the financial sector and the government has further accelerated MSME digitalization, enabling better transaction recording and easier access to business loans. Based on the aforementioned background, the researcher is interested in conducting a study titled: "The Influence of Financial Literacy, Financial Technology, and Financial Inclusion on Financial Performance of MSMEs in the Service and Trade Sectors in Pontianak City."

2. RESEARCH METHOD

Type of Research

This study employs an associative method, aims to answer questions about the relationship between two or more variables (Sugiyono 2019). This research is categorized as causal research, which seeks to explain the influence between variables.

Data Collection

The data collection techniques used in this study involve both primary and secondary data. According to Sugiyono (2019), primary data is obtained directly from the source through observation. In this study, questionnaires were distributed to MSME actors in the service and trade sectors in Pontianak City. According to Sugiyono (2019), secondary data is obtained through other sources, such as documents or other people, to complement the primary data. Secondary data in this study served to supplement the information needed from relevant sources.

Population and Sample

According to Sugiyono (2019), the population refers to the general area consisting of objects or subjects that have certain characteristics determined by the researcher to be studied and concluded. The population in this study consists of all MSME actors engaged in the service and trade sectors in Pontianak City, totaling 2,218. According to Sugiyono (2019), a sample is a portion of the population that represents all the characteristics of the population. The sample in this study was determined using the Slovin formula. Based on the calculations using the Slovin formula, the minimum required sample size is 96 MSMEs. However, the author decided to select a sample of 150 MSME actors in the service and trade sectors in Pontianak City. The sample was selected using the Proportionate Stratified Random Sampling technique, where the population was divided into proportional strata (Sugiyono, 2019).

Table 1. Sample Size

No	Business Type	Sample Size
1.	Micro Business	135
2.	Small Business	13
3.	Medium Business	2
	Total Sample	150

Research Variables & Measurement Scale

This study uses independent and dependent variables. The independent variables in this study are Financial Literacy (X1), Financial Technology (X2), and Financial Inclusion (X3). The dependent variable is Financial Performance (Y). The measurement scale used in this study is the Likert scale. The Likert scale used has five levels of response preferences, ranging from "Strongly Agree" to "Strongly Disagree" (Siregar, 2018).

Data Analysis

Validity testing was conducted by comparing the calculated correlation value (r) with the table r value, where a variable is considered valid if the calculated r > table r (Ghozali, 2018). Reliability testing assesses the consistency of respondents' answers over time; a questionnaire is deemed reliable if responses remain stable across repeated measurements (Ghozali, 2018). The classical assumption tests include normality (Kolmogorov-Smirnov), multicollinearity (VIF and tolerance), and linearity tests to ensure data suitability for regression analysis. (Ghozali, 2018). Data analysis was conducted using multiple linear regression to examine the influence of the independent variables (Financial Literacy, Financial Technology, and Financial Inclusion) on the dependent variable, SME Financial Performance.The regression model used was Y=a+b1X1+b2X2+b3X3+e. The simultaneous influence test (F-test) was used to assess the joint influence of independent variables on the dependent variable (Ghozali, 2018), the partial influence test (t-test) was employed to evaluate the effect of each independent variable on the dependent variable (Ghozali, 2018).

3. RESULTS AND DISCUSSION

3.1 Test Research Instruments

3.1.1 Validity Test

After collect the questionnaires from the respondents, then the validity test is conducted on the obtained data. Validity shows the accuracy and precision of a measuring instrument in performing its measuring function.

Table 2. Validity Test Results

Variable	Indicators	r value	r table	Description
Financial Literacy (X1)	X1.1	0,240	0,159	Valid
	X1.2	0,254		
	X1.3	0,677		
	X1.4	0,727		
	X1.5	0,789		
	X1.6	0,641		
Financial Technology (X2)	X2.1	0,434	0,159	Valid
	X2.2	0,645		
	X2.3	0,703		
	X2.4	0,722		
	X2.5	0,687		
	X2.6	0,416		
Financial Inclusion (X3)	X3.1	0,429	0,159	Valid
	X3.2	0,676		
	X3.3	0,644		
	X3.4	0,619		
	X3.5	0,647		
	X3.6	0,415		
Financial Performance (Y)	Y.1	0,645	0,159	Valid
	Y.2	0,741		
	Y.3	0,778		
	Y.4	0,798		
	Y.5	0,360		
	Y.6	0,206		

Source: Processed Data, 2025.

Based on the validity test results in **Table 1**, all items have an r-count > r-table (0.159), indicating that all statement items are valid and suitable for use in the study.

3.1.2 Reliability Test

The reliability test is conducted to determine the extent to which the questionnaire items can be relied upon as consistent measurement tools. In this study, the reliability test employed the Cronbach's Alpha method. An item is considered reliable if the resulting Cronbach's Alpha value is at least 0.6. The reliability test results for all variables are presented in Table 3 below.

Table 3. Reliability Test Results

Variable	Cronbach's Alpha	Description
Financial Literacy (X1)	0.649	Reliable
Financial Technology (X2)	0.666	
Financial Inclusion (X3)	0.606	
Financial Perfomance (Y)	0.677	

Source: Processed Data, 2025.

Based on the reliability test results for the variables shown in Table 2 above, Cronbach's Alpha values > 0.60 are obtained, so it can be concluded that all variable items in the study are reliable and can be used.

3.2 Classic Assumption Test

3.2.1 Normality Test

This normality test aims to determine the distribution of data in the variables that will be used in the study. Data normality can be seen by using the Kolmogorov-Smirnov normality test. The results of the normality test can be seen in the following table:

Table 4. Normality Test Results

Test	Value
N (Sample)	150
Test Statistic	.065
Asymp.Sig.(2-tailed)	.200[c, d]

Source: Processed Data, 2025.

Table 4 shows the results of normality test, which indicate that the Kolmogorov-Smirnov test result is significant at 0.200. This value is > 0.05, which means that the residual values are normally distributed.

3.2.2 Linearity Test

The linearity test in this study was conducted to determine whether a linear relationship exists between the independent and dependent variables. The Test for Linearity method was used for this analysis. The results, obtained through SPSS, are presented in Table 5 below.

Table 5. Result of Linearity

Variable	Deviation from Linearity	Description
Financial Perfomance * Financial Literacy	0.233	Linear
Financial Perfomance * Financial Technology	0.807	
Financial Perfomance * Financial Inclusion	0.321	

Source: Processed Data, 2025.

Based on the linearity test results in **Table 5**, the significance value in the "Deviation from Linearity" column is > 0.05, indicating a linear relationship between the independent and dependent variables

3.2.3 Multicollinearity Test

Multicollinearity test analyzes correlations between independent variables using VIF and tolerance. No multicollinearity exists if tolerance > 0.10 or VIF < 10.

Table 6. Multicollinearity Test Results

Variable	Tolerance	VIF
Financial Literacy	.949	1.054
Financial Technology	.233	4.290
Financial Inclusion	.229	4.373
Dependent Variable: Financial Performance		

Source: Processed Data, 2025.

Based on **Table 6**, it can be seen that the tolerance value of each variable is > 0.10 and VIF < 10. It can be concluded that the regression model does not show symptoms of multicollinearity. Thus, the three independent variables are suitable for use in multiple linear analysis because they do not influence each other linearly and excessively.

3.3 Multiple Linear Regression Analysis

Multiple linear regression analysis to determine the influence of independent variables on dependent variables conducted on 150 respondents. The following is the Multiple Linear Regression Analysis Table:

Table 7. Multiple Linear Regression Analysis Results

Research Variable	Coefficients	T Statistic	Significance Value
(Constant)	3.314	8.761	.000
Financial Literacy	.113	2.205	.029
Financial Technology	.006	.114	.910
Financial Inclusion	.145	2.871	.005
Dependent Variable: Financial Performance.			

Source: Processed Data, 2025.

Based on the results of the multiple linear regression analysis presented in **Table 7** and referring to the regression equation, the following results are obtained:

$$\mathbf{Y = 1.017 + 0.321X_1 + 0.282X_2}$$

The multiple linear regression equation can be explained as follows:

a. The constant value is positive, namely 3.314, indicating that if the variables (X1, X2, and X3) are zero, the value of the dependent variable (Y) is 3.314. This means that even though there is no influence from the three dependent variables, there is still a base value of variable Y of 3.314.

b. The regression coefficient of variable X1 is 0.113, indicating that every 1-unit increase in variable X1 will increase the value of variable Y by 0.113. This indicates that variable X1 has a positive influence on variable Y.

c. The regression coefficient of variable X2 is 0.006, indicating that every 1-unit increase in variable X2 will increase variable Y by 0.006. This also indicates a positive influence of variable X2 on Y.

d. The regression coefficient of variable X3 is 0.145, indicating that every 1-unit increase in variable X3 will increase variable Y by 0.145. This also indicates a positive influence of variable X3 on Y.

3.4 Correlation Coefficient Analysis (R)

Correlation analysis is conducted to test associative hypotheses, namely the relationship between variables in a population through data on the relationship between variables in a sample. The results of the correlation coefficient test can be seen in the following table:

Table 8. Correlation Coefficient Test Results (R)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.267[a]	.071	.052	.30078
Predictors: (Constant), Financial Inclusion, Financial Technology, Financial Literacy				
Dependent Variable: Financial Performance				

Source: Processed Data, 2025.

Based on the Table 8. it can be seen that the R value (correlation) obtained is 0.267. This value is between 0.20 and 0.399, which means that there is a positive relationship between Financial Literacy (X1), Financial Technology (X2), and Financial Inclusion on Financial Performance (Y). Therefore, it can be concluded that overall, there is a low relationship between the three independent variables (X) and the dependent variable (Y). This relationship is positive, meaning that if one or more independent variables increase, it will be followed by an increase in Financial Performance.

3.5 Analysis of the Coefficient of Determination R^2

This test is to determine how much contribution variable X has on variable Y. The results of the Coefficient of Determination test (calculations can be seen in **Table 7**) state that the Coefficient of Determination (or R square) obtained is 0.071. This means that 7.1% (1 x 0.071 x 100%) of the variation in the Financial Performance (Y) variable can be explained by the Financial Literacy (X1), Financial Technology (X2), and Financial Inclusion (X3) variables simultaneously. The remaining 92.9% is explained by other factors not investigated in this study. Thus, it can be concluded that this regression model has sufficient ability to explain the dependent variable; however, there are still other factors outside the scope of this study that influence Financial Performance.

3.6 Simultaneous Test (F Test)

Simultaneous influence tests are used to determine whether independent variables collectively influence dependent variables. The results of the simultaneous test (F test) can be seen in the following table:

Table 9. Simultaneous Test Results (F Test)

Model	Sum of Squares	Mean Square	F	Significance
Regression	1.011	1.011	3.725	.013[b]
Residual	13.208	.090		

Dependent Variable: Financial Performance
Predictors: (Constant), Financial Inclusion, Financial Technology, Financial Literacy

Source: Processed Data, 2025.

Based on the results of the F test in Table 9, the obtained F value is 3.725 with a significance level of 0.013 < 0.05. This indicates that there is a statistically significant influence between the variables Financial Literacy (X1), Financial Technology (X2), and Financial Inclusion (X3) on Financial Performance (Y) simultaneously. It can be concluded that there is a significant simultaneous influence between the independent variables and the dependent variable, because the significance value is less than 0.05, so Ha is accepted and Ho is rejected.

3.7 Partial Test (t Test)

This T-test is conducted to determine the effect of each independent variable or partially on the dependent variable. The results of the partial test (T-test) can be seen in the following table:

Table 10. Partial Test Results (t Test)

Research Variable	Coefficients	t Statistic	Significance Value
(Constant)	3.314	8.761	.000
Financial Literacy	.113	2.205	.029
Financial Technology	.006	.114	.910
Financial Inclusion	.145	2.871	.005

Dependent Variable: Financial Performance.

Source: Processed Data, 2025.

Based on result can be seen the partial influence test (t-test) produced a sig value which can be interpreted as follows:

a. The t-value for the Financial Literacy (X1) variable is 2.205 with a sig of 0.029 < 0.05. Thus, Ha is accepted, meaning that Financial Literacy has an effect on Financial Performance. This indicates that the higher the understanding of business actors regarding financial aspects, the greater the likelihood that the business can survive and be sustainable. This is in line with the study conducted by Rumain et al. (2021), which showed that financial literacy has a significant influence on financial performance. The higher the entrepreneurs' understanding of financial aspects, the greater the likelihood that the business will be sustainable and resilient.

b. The t-value for the Financial Technology (X2) variable is 0.114 with a significance level of 0.910 > 0.05. Therefore, the null hypothesis (Ho) is accepted, meaning that Financial Technology does not influence Financial Performance. This indicates that business actors' understanding of Financial Technology is still not optimal or has not been fully utilized to support improvements in financial performance. This finding is also consistent with the research by Salsabila (2021), which revealed that financial technology does not have a significant effect on the financial performance of MSMEs. Entrepreneurs' understanding and utilization of financial technology remain suboptimal and have not been maximized to support improvements in financial performance.

c. The t-value of the Financial Inclusion variable (X3) is 2.871 with a significance level of 0.005 < 0.05. Therefore, the alternative hypothesis (Ha) is accepted, meaning that Financial Inclusion significantly influences Financial Performance. This indicates that the higher the level of access, usage, and understanding of formal financial services among business actors, the better their financial performance. Similarly, the study by Yunus et al. (2022) demonstrated that financial inclusion has a positive impact on financial performance. The greater the level of access to, use of, and understanding of formal financial services among entrepreneurs, the better their financial performance tends to be.

4. CONCLUSION

Based on the results of the study, it can be concluded that financial literacy, financial technology, and financial inclusion have a positive impact on the financial performance of SMEs in the Services and Trade sectors. The results of the F-test indicate that all three independent variables have a positive and significant effect on financial performance simultaneously, while the t-test shows that financial literacy and financial inclusion have a significant impact on financial performance. However, financial technology does not have an impact on financial performance. Overall, the study shows that improving financial literacy and financial inclusion can contribute to the financial performance of SMEs, while the use of financial technology still needs to be enhanced. Based on these conclusions, it is recommended that SMEs in the Services and Trade

sectors in Pontianak City should improve financial literacy and make optimal use of financial inclusion, as both have been shown to significantly affect financial performance. In addition, the utilization of financial technology needs to be increased, as it has shown an impact but has not been maximally utilized. The government and related institutions are expected to provide support through education and facilitate access to more SME-friendly financial technology. Future researchers are also encouraged to expand the scope of the objects and variables in their studies to obtain more comprehensive results that can strengthen the existing findings.

ACKNOWLEDGEMENTS

The author would like to express sincere gratitude to all parties who have supported the completion of this research. Special thanks are extended to the SMEs in the service and trade sectors in Pontianak City who willingly participated as respondents and provided valuable data for this study. The author also wishes to thank academic supervisors and the Faculty of Economics and Business at Universitas Muhammadiyah Pontianak for their guidance, encouragement, and constructive feedback throughout the research process. This research would not have been possible without the contribution and cooperation of all those involved. Hopefully, the findings of this study will serve as a meaningful contribution to the development of SMEs and the formulation of policies aimed at enhancing financial performance through literacy, inclusion, and technological advancement.

REFERENCES

Dayanti, F. K., Susyanti, J., & Abs, M. K. (2020). Pengaruh Literasi Keuangan, Pengetahuan Keuangan Dan Sikap Keuangan Terhadap Perilaku Manajemen Keuangan Pada Pelaku Usaha UMKM Fashion Di Kabupaten Malang. *E-JRM: Elektronik Jurnal Riset Manajemen*, *9*(13).

Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*. Badan Penerbit Universitas Diponogoro.

Hanasri, A., Rinofah, R., & Sari, P. P. (2023). Pengaruh Literasi Keuangan, Pengetahuan Keuangan, dan Sikap Keuangan Terhadap Kinerja Keuangan pada Pelaku UMKM Bisnis online di Bantul. *Ekonomis: Journal of Economics and Business*, *7*(1), 443-450

Hasyim, T. M., & Hasibuan, D. R. (2022). Analisis Peranan Fintech dan E-Commerce terhadap Perkembangan UMKM. *Keunis*, *10*(2), 19-28.

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.

Nopiyani, P. E., & Indiani, P. R. (2023). Pengaruh sikap keuangan, perilaku keuangan dan literasi keuangan terhadap kinerja keuangan umkm pada pemdes ambengan. *Jurnal Akuntansi Kompetif*, *6*(3), 411-418.

Putri, D., Harahap, I., Sugiarti, S., & Efendi, B. (2024). Peningkatan kinerja keuangan UMKM di Indonesia melalui literasi keuangan dan inklusi keuangan. *Jurnal Ilmiah Edunomika*, *8*(1).

Rumain, I. A. S., Mardani, R. M., & Wahono, B. (2021). Pengaruh literasi keuangan dan pengelolaan keuangan terhadap kinerja keuangan pada UMKM kota Malang. *E-JRM: Elektronik Jurnal Riset Manajemen*, *10*(08).

Salsabila, D. R. (2021). *Pengaruh literasi keuangan, financial technology dan inklusi keuangan terhadap kinerja umkm di kota Kupang* (Doctoral dissertation, STIE Perbanas Surabaya).

Siregar, S. (2018). *Metode penelitian kuantitatif dilengkapi dengan perbandingan perhitungan manual dan SPSS*. Jakarta: Kencana Prenada Media Group.

Soetiono, (2017). Kajian Perlindungan Konsumen Sektor Jasa Keuangan: Online Dispute Resolution (ODR). *Jakarta: Departemen Perlindungan Konsumen OJK*.

Sugiyono (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Yunus, M. H., Semmaila, B., & Dewi, R. (2022). Pengaruh Risiko Bisnis, Literasi Keuangan dan Inklusi Keuangan Terhadap Kinerja Keuangan dan Keberlangsungan Usaha pada Sektor Usaha Mikro, Kecil dan Menengah di Kota Palopo. *Journal of Management Science (JMS)*, *3*(2), 168-199.