

The Effect of Financial Management and Financial Technology on the Performance of SMEs

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Abstract

The purpose of this study is to ascertain how financial technology and management affect MSMEs' performance in Pariaman City. Using a straightforward rando sample procedure and a descriptive quantitative analysis approach, this study examines 100 MSME respondents in Pariaman City. Multiple linear regression tests, hypothesis tests (T tests, F tests), determination coefficient tests (R²), validity and reliability tests, and classical assumption tests (normality, multicollinearity, and heteroscedasticity tests) were used to process the data that were gathered via questionnaires and SPSS 25. The results of the T test (partial) show that (1) Financial management have a significant effect on the performance of MSMEs in Pariaman City with a sig. value of $0.000 < 0.05$, (2) Financial technology has a significant effect on the performance of MSMEs in Pariaman City with a sig. value of $0.000 < 0.05$. With a sig. value of $0.000 < 0.05$, the F test demonstrates that financial technology and financial management both significantly impact MSME performance. This demonstrates how MSMEs in Pariaman City enhance their performance by utilising financial technology and implementing financial management in the best possible way.

Keywords: *Financial Management; Financial Technology; MSME Performance*

Introduction

Micro, Small, and Medium Enterprises (MSMEs) represent fundamental pillars of global economic infrastructure. These enterprises serve as catalysts for economic expansion, employment generation, and technological innovation across numerous geographical regions worldwide (Gherghina *et al.*, 2020; Mahmudova & Katonáné Kovács, 2018). Their significance extends beyond developing nations, encompassing established economies in advanced countries as well. Within Indonesia specifically, the MSME sector maintains substantial influence on the national Gross Domestic Product (GDP) (Nafisa *et al.*, 2024).

Previous research has established the resilience of MSMEs during economic disruptions, particularly during the COVID-19 pandemic when these enterprises demonstrated remarkable capacity to maintain operational continuity (Zighan *et al.*, 2022; Zutshi *et al.*, 2021). Contemporary studies indicate that these businesses contribute meaningfully to economic development by elevating the gross domestic product contribution to 61.07% by 2021. Naradda Gamage *et al.* (2021) illustrate that digital transformation offers both benefits and obstacles for the swift progress of MSMEs.

Research has further established that various environmental factors, including governmental policies, significantly influence MSME operational effectiveness (Veronica *et al.*, 2020; Yadewani *et al.*, 2023, 2024). These factors can create environments that either support entrepreneurial initiatives or present obstacles to business sustainability (Muazu *et al.*, 2021; Arshad & Arshad, 2019). Emphasising that developing a company's internal capabilities through robust operational foundations can enhance business competitiveness and innovation sustainability, ultimately improving long-term competitive advantages (Le & Ikram, 2022). Furthermore, SMEs' expansion and adaptation strategies are influenced by entrepreneurial leadership characteristics (Al Mamun *et al.*, 2018).

The competency of human resources remains intrinsically connected to operational challenges that frequently emerge in small, medium, and large enterprise management (Al Mamun, Fazal & Muniady, 2019; Ibidunni *et al.*, 2020; Mutuku *et al.*, 2022; Yadewani, Durai Pandi & Rahayu, 2024). This demonstrates that human resource expertise deficiencies can significantly impact or intensify operational challenges across various business domains.

Financial Management Challenges in MSMEs

Contemporary financial management inadequacies in financial competencies (HR components) may negatively influence small business operational effectiveness. Modern financial management approaches, including the integration of personal and business financial resources, can significantly impact SMEs' operational outcomes (Mendy, 2021). Fintech has brought about a significant transformation in the financial sector. It has not only introduced new business models and innovative solutions but has also revolutionised traditional financial services. This has directly improved customer experience and satisfaction. Furthermore, fintech has opened the door for new players, who are now competing with existing financial institutions. This has made the financial industry as a whole more accessible, convenient and efficient for customers, and its future development is predicted to continue rapidly (Gunawardane, 2023).

Consistent with technological advancement, financial technology (fintech) provides diverse innovative solutions that can potentially transform how SMEs manage their financial operations, encompassing digital payment systems, online lending platforms, and automated bookkeeping applications. Research by Thathsarani and Jianguo (2022) indicates that implementing digital technologies, particularly fintech solutions, can significantly accelerate SME development processes.

MSMEs represent essential components of Pariaman City's economic infrastructure. This growth not only demonstrates the local community's entrepreneurial capabilities and business potential but also illustrates the resilience of the MSME sector when confronting challenges. A comprehensive analysis of MSMEs' capacity to overcome operational obstacles and maximise their potential for enhancing local economic development can be derived from this information.

Despite various opportunities and potential for Small and Medium Enterprises (SMEs) in the digital era, empirical evidence indicates that SMEs in Pariaman City continue to face significant challenges in managing their business finances. The demographic characteristics of Pariaman City's population, which maintains strong traditional values and demonstrates varying degrees of technological acceptance, may contribute to this circumstance. Currently, numerous SMEs in Pariaman may continue relying on conventional financial management approaches that lack efficiency and are susceptible to operational errors. Additionally, limited understanding and confidence in digital financial innovations, including financial technology solutions, restricted access capabilities, and inadequate financial and digital literacy present significant barriers to implementing appropriate technological infrastructure across various areas of Pariaman City.

Research Objectives and Significance

This study aims to investigate how financial management techniques, and the implementation of financial technology affect the performance of small and medium-sized businesses in Pariaman City. The main driving force behind this study is the paucity of prior research that has explicitly examined the financial management issues faced by SMEs in Pariaman City, as well as the potential contribution of

financial technology as a creative remedy and catalyst for improving SME performance in the modern digital landscape. Therefore, this study aims to give a more thorough grasp of how financial management techniques, and the use of financial technology can improve SME performance in the Pariaman City local context. This will have useful ramifications for business actors, legislators, and other stakeholders working to support the SME sector.

The research title is: The effect of financial management and financial technology on the performance of MSMEs in Pariaman City.

Review of Literature

Micro, Small and Medium Enterprises Classification

MSMEs are categorised according to diverse criteria across different regulatory frameworks. In Indonesia, Law No. 20 of 2008 concerning Micro, Small, and Medium Enterprises establishes the following enterprise classifications (Badan Pemeriksa Keuangan Republik Indonesia, 2008):

1. **Micro Business:** A profitable company run by an individual or by individual business entities that satisfy the legal requirements for micro businesses.
2. **Small Business:** An autonomous, profitable economic venture run by people or organisations that do not belong to, control, or are directly or indirectly associated with medium-sized or big firms that fit the requirements for small businesses.
3. **Medium Business:** An autonomous, profitable economic venture run by people or organisations that are not divisions or branches of corporations that own, control, or are connected to small or large businesses either directly or indirectly, and whose yearly sales or net worth comply with legal requirements.

In Indonesia, the classification of Micro, Small, and Medium Enterprises (MSMEs) is governed by Law No. 20 of 2008 concerning Micro, Small, and Medium Enterprises. This legislation establishes a clear framework for identifying and categorising businesses based on specific criteria, such as the size of the business, its net worth, and annual sales. These categories are crucial for ensuring that MSMEs receive appropriate government support and assistance based on their capacity and potential for growth. The law categorises businesses into three distinct groups: Micro Business, Small Business, and Medium Business (Badan Pemeriksa Keuangan Republik Indonesia, 2008).

1. Micro Business:

Micro businesses are the smallest category of MSMEs and are primarily operated by individuals or small business entities. These businesses are typically characterised by a low level of capital investment, limited resources, and a smaller scale of operations. A microbusiness is an independent entity that meets specific criteria defined by the law, such as having a modest annual revenue or net worth. These businesses typically operate in local or niche markets, and their impact on the broader economy, though significant, is more localised. In Indonesia, microbusinesses form the backbone of the informal sector, providing employment and livelihood opportunities for millions of people.

2. Small Business:

Small businesses represent a step up from microenterprises in terms of size and capacity. A small business is an independent, productive economic entity that operates on a slightly larger scale. It is owned and run by individuals or entities that are not subsidiaries or branches of medium or large businesses. Small businesses must meet specific thresholds, such as having a net worth or annual sales that fall between the limits defined for micro and medium businesses. Unlike micro businesses, small businesses often have more formalised structures, employ a larger workforce, and may have broader market reach, often participating in both local and regional markets. The law ensures that small businesses are not under the control or influence of larger corporations, maintaining their independence and encouraging sustainable growth.

3. Medium Business:

Medium businesses are more advanced in terms of their operations and scale compared to micro and small enterprises. These businesses are also independent and must not be subsidiaries or branches of larger businesses. Medium businesses operate with a larger net worth and higher annual sales than small businesses. They play a critical role in the national economy by bridging the gap between small businesses and large corporations. Typically, medium enterprises employ a larger workforce, engage in more complex operations, and have greater access to financial resources, which allows them to expand their market reach significantly. The law specifies that medium businesses must meet certain net worth or sales thresholds, which differentiate them from smaller enterprises. These businesses often serve as engines for innovation and job creation in both local and national markets.

The legal framework for MSMEs in Indonesia is designed to provide each category of enterprise with targeted support, ensuring that businesses of all sizes can thrive (table 1). The criteria laid out by the law aim to ensure fairness in the classification process, allowing businesses to access the appropriate government programmes and financial assistance based on their size and operational capacity. As such, the classification system not only helps to regulate the business landscape but also fosters the growth of a diverse and vibrant economy. Through this system, Indonesia is able to promote the development of small and medium enterprises while providing protection to the smallest businesses, ensuring their survival and long-term sustainability.

Table 1: Criteria for MSMEs Net Worth (excluding land and buildings)

Type	Criteria for MSMEs Net Worth (excluding land and buildings where business is located)	Annual Sales Results
Intermediate	Rp 500 million to Rp 50 billion	Rp 2.5 billion to Rp 50 billion
Small	Rp 50 million to Rp 500 million	Rp. 300 million to Rp. 2.5 billion
Micro	< Rp 50 million	< Rp. 300 million

Sources : Badan Pemeriksa Keuangan Republik Indonesia, 2008

Business Performance Assessment

Contemporary research approaches define business performance through multidimensional perspectives. Hunjra *et al.* (2021) demonstrate how ownership perception of sales growth, profit rates, asset escalation, client base expansion, and other factors are utilised to measure performance. As a result, surveys are frequently used to assess SME performance using the perspectives of entrepreneurs. Additionally, different employment outcomes might help owners or managers decide on survival and expansion plans for their businesses (Yadewani, 2024). Research indicates that business performance represents the result of success levels or accomplishment degrees achieved by firms or companies during specific time periods because it has implemented activities or business operations.

Financial Management and SME Performance

According to Suindari and Juniariani (2020) financial management encompasses comprehensive actions related to funding, acquisition, and asset management with multiple strategic objectives. Three financial management components—financial accounting, working capital management, and financial planning and control—were identified by other academics as essential practices for SMEs (Sana, Poddar & Paul, 2020). This interpretation suggests that financial management extends beyond these three components, encompassing strategic decisions related to acquisitions and funding that affect long-term growth and sustainability of businesses.

The initial hypothesis can be formulated as: **H1:** Financial management practices significantly influence MSME performance in Pariaman City.

Financial Technology and Small Business Performance

Fintech is a term for various technology-based solutions that aim to improve financial services and customer satisfaction (Pandey & Sergeeva, 2022). One of the main advantages of fintech is that it has enabled financial institutions to provide faster, cheaper, and more convenient services to their customers (Alkhawaldeh *et al.*, 2023). Financial technology represents advancement in financial services that utilises technical innovations to facilitate people's performance of various financial tasks. It encompasses providing online payments, new forms of financial technology (fintech), and the widespread adoption of product and service transactions through social networks and Internet platforms, all contributing to e-commerce activities at unprecedented scale and intensity under the influence of 4.0 technologies (Hanh, 2020). Formulates the hypothesis as follows:

H2: Financial technology significantly impacts MSME performance in Pariaman City.

H3: Financial management and financial technology collectively influence MSME performance in Pariaman City.

Methodology

This study implements a descriptive quantitative analysis approach utilising probability sampling methods. Probability sampling ensures equal opportunities for each population member to be selected as samples (Mweshi & Sakyi, 2020). The simple random sampling technique was implemented due to its straightforward approach to gathering sample members from populations randomly without considering existing strata.

Sample Size Determination

Using the Slovin formula with 10% (0.10) sampling error, the sample size was calculated from a total population of 10,114 MSME units in Pariaman City, resulting in 100 respondents.

Data Collection and Analysis

Data collection utilised structured questionnaires processed through SPSS version 25. The analytical framework included: 1) Instrument Tests: Validity and reliability testing; 2) Classical Assumption Tests: Normality, multicollinearity, and heteroscedasticity tests; 3) Multiple Linear Regression Analysis; 4) Hypothesis Testing: T-test and F-test; 5) Coefficient of Determination Test (R^2).

Variable Measurement

The subsequent stage after determining the study's primary variables involves comprehending how they will be measured. (See table 2)

Table 2: Research Variables and Measurement Indicators

Variable	Measurement Indicators	Items
Financial Management (X1) (Maianto <i>et al.</i> , 2024; Párraga Franco <i>et al.</i> , 2021)	1. Profit margin 2. Current ratio 3. Debt-to-equity ratio Asset turnover ratio	4 items
Financial Technology (X2) (Ojo & Nwaokike, 2018)	1. Customer satisfaction 2. Customer retention 3. Digital payment adoption Technology efficiency	4 items
MSME Performance (Y) (Hunjra <i>et al.</i> , 2021)	1. Profitability 2. Sales growth 3. Return on assets 4. Market share 5. Resource efficiency 6. Productivity 7. Sales profitability Return trends	8 items

Source: Developed based on current literature (2024)

Results

Test Instruments

Validity Tests

Validity tests were performed on each questionnaire item using Pearson correlation. An instrument is declared valid if the Pearson Correlation value $> r$ table. In this study, the number of respondents was 100, so r table = 0.165 was obtained. After the validity test process was carried out, the results on the financial management variable (X1) were all valid with a Pearson Correlation value of > 0.165 . The financial technology variable (X2) is also declared valid for all question items because the Pearson Correlation value is > 0.165 . Meanwhile, the results on the MSME performance variable (Y) were obtained as follows:

Table 3 : Validity Test of MSME Performance Variables

Statement	Pearson Correlation	Description
I run a planned business and run according to the work plan (Y ₁)	0.402	Valid
here was an increase in the number of customers every month (Y ₂)	0.607	Valid
The profit I get from sales growth is always increasing (Y ₃)	0.398	Valid
Monthly business sales increase (Y ₄)	0.649	Valid
My business has always experienced an increase in sales (Y ₅)	0.547	Valid
The increase in the number of sales occurred at certain times (Y ₆)	0.055	Invalid
The business I run has a stable position (Y ₇)	0.444	Valid
Cash position management is carried out simultaneously with employees (Y ₈)	0.179	Valid
Cash management is done well and planned (Y ₉)	0.342	Valid

Source: Statistical data processing SPSS 25, 2025

Based on table 3, the next stage of testing can be carried out using 8 questionnaire statement items that are declared valid. While 1 statement item on Y6 is invalid because the Pearson Correlation value < 0.165 .

The Reliability Test

The Reliability Test that has been carried out obtained the following results:

Table 4 : Uji Reliabilitas

Variable	Reliability Statistics	
	Cronbach's Alpha	N of Items
Financial Management (X1)	0.844	8
Fin Tech (X2)	0.932	10
SMEs Performance (Y)	0.727	7

Source: Statistical data processing SPSS 25, 2025

Based on Table 4, the results were obtained that all variables in this study Financial Management (X1) and Financial Technology (X2) and MSME Performance (Y) were declared reliable because they had a Cronbach's alpha value > 0.6 .

Classic Assumption**Test Normality Test****Table 5: Uji Normalitas**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		95
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	3.05835975
Most Extreme Differences	Absolute	0.059
	Positive	0.059
	Negative	-0.040
Test Statistic		0.059
Asymp. Sig. (2-tailed)		0.200 ^{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: Statistical data processing SPSS 25, 2025

Based on table 5 above, it can be seen that the value of each variable is 0.059 with a significant value of $0.200 > 0.05$. So, it can be concluded that the data is distributed normally.

Multicollinearity Test

This test examines the tolerance value of the opponent and examines the Variance Inflation Factor (VIF). If the Tolerance value is < 0.10 or equal to $VIF > 10$, then the variables in a study can be concluded to experience symptoms of multicollinearity (Shrestha, 2020). After testing, the following results were obtained:

Table 6: Multicollinearity Test

Coefficients^a			
Model		Collinearity Statistics	
		<i>Tolerance</i>	<i>VIF</i>
1	Financial Management	0.655	1.52
	Fin Tech	0.634	1.577
a. Dependent Variable: SMEs Performance			

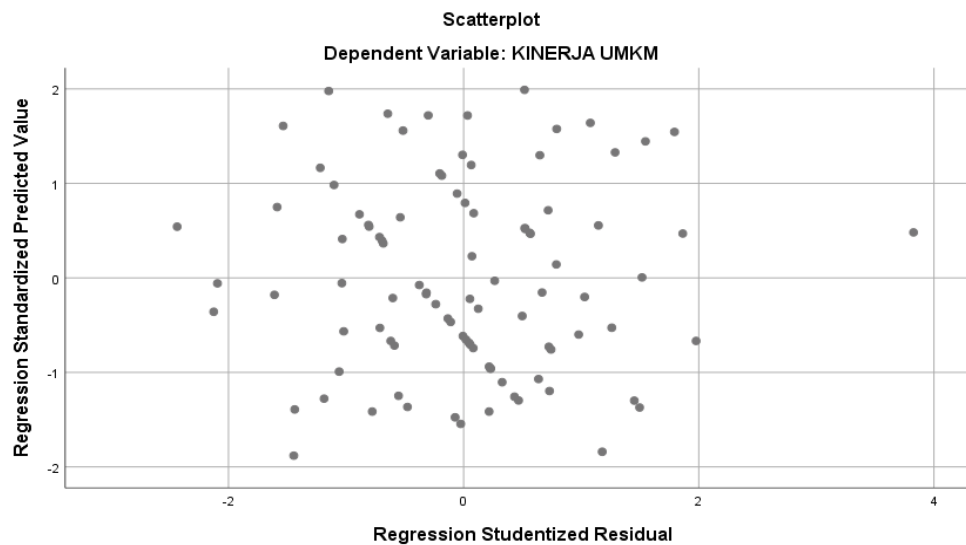
Sources: Statistical data processing SPSS 25, 2025

Based on table 6 above, it can be seen that the independent variable has a tolerance value of > 0.10 and a VIF value of < 10 . Therefore, it is concluded that the independent variable in this study is free from multicollinearity symptoms.

Heteroscedasticity Test

Heteroscedasticity tests are performed using the scatterplot graph test or from the predicted value of the dependent variable, namely SRESID with residual error, namely ZPRED. After data processing, the following results were obtained:

Scatterplot



Sources: Statistical data processing SPSS 25, 2025

Figure 1 : Scatterplot Heteroskedastisitas Test

Based on Figure 1, The scatterplot analysis reveals no clear pattern with points spread above and below zero on the y-axis, indicating absence of heteroscedasticity problems.

Multiple Linear Regression Test and Hypothesis Test (T Test and F Test)

After data processing using the SPSS 25 application on the independent variables to be tested for their influence, namely X1 (Financial Management) and X2 (Financial Technology) on the dependent variable Y (MSME Performance), the results of data processing were obtained which can be seen in the following table 7.

Table 7: Multiple linear test

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.264	1.358		13.444	0.000
	Financial Management	0.145	0.060	.0257	2.419	0.017
	Fin Tech	0.141	0.045	0.336	3.156	0.002
a. Dependent Variable: SMEs Performance						

Sources: Statistical data processing SPSS 25, 2025

Based on table 7 above, the following estimation model analysis is obtained:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

$$Y = 18,264 X_1 + 0,145 X_2 + 0,141 + e$$

This can be interpreted that the performance of MSMEs without any independent variables is 18.264. Meanwhile, if there is an increase of 1 unit of the financial management variable (X1) while other variables do not increase, then the performance of MSMEs will increase by 0.145. Meanwhile, if there is an increase of 1 unit of the financial technology variable (X2) while other variables do not increase, then the performance of MSMEs will increase by 0.141. Based on the results of data processing in table 7 above, the results of the Hypothesis Test can be described as follows:

T-Test (Partial)

H1: Financial management has a significant effect on the performance of MSMEs in Pariaman City.

The regression coefficient value obtained is 0.145 with a significance value (p -value) of $0.017 < 0.05$. This means that financial management has a significant effect on the performance of MSMEs, so it can be concluded that H1 is accepted.

H2: Financial technology has a significant influence on the performance of MSMEs in Pariaman City.

The regression coefficient value obtained is 0.1451 with a significance value (p -value) of $0.002 < 0.05$. This means that financial technology has a significant effect on MSME performance, so it can be concluded that H2 is accepted.

F Test (Simultaneous)

Table 8: F Test (Simultaneous)

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	395.039	2	197.519	18.933	0.000 ^a
	Residual	1011.961	97	10.433		
	Total	1407.000	99			
a. Predictors: (Constant), X1, X2						
b. Dependent Variable: Y						

Sources: Statistical data processing SPSS 25, 2025

With a sig value (p -value) of $0.000 < 0.05$, the computed f value is 18.933 based on table 8 above. The performance of MSMEs in Pariaman City is thus significantly impacted by the simultaneous (combined) variables of financial technology and financial management.

Coefficient of Determination Test (R2)

Table 9: Coefficient of Detarmination Test (R2)

Model Summary ^b				
Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	0.530 ^a	0.281	0.266	3.230
a. Predictors: Constant, Financial Management, Financial Technology				
b. Dependent Variable: SMEs Performance				

Sources: Statistical data processing SPSS 25, 2025

Table 9 indicates that the above processing yielded a determination coefficient value (R^2) of 0.281. This demonstrates that a significant portion of MSME performance can be accounted for by independent variables, specifically financial technology and management, which account for 28.1% of the total, with other variables outside the model influencing the remaining 71.9%.

Discussion**Financial Management Impact on MSME Performance**

The research confirms that financial management significantly influences MSME performance in Pariaman City ($t = 2.419$, $p < 0.05$). Since this result is consistent with current international research showing that good financial management techniques can enhance organisational performance by impacting performance efficiency and success, H1 is deemed to be valid. according to studies (Matara & Sreedhara, 2020; Widjanarko et al., 2022). This result demonstrates that MSME entrepreneurs in Pariaman City possess adequate financial management capabilities to implement effective financial practices supporting business performance enhancement.

Financial Technology Impact on MSME Performance

The data reveals that financial technology significantly affects MSME performance ($t = 3.156$, $p < 0.05$). This finding is consistent with current global trends where Fintech improves the scale of credit available to firms and reduces financing costs, which enables firms to capture high-return investment projects and thus improve performance (Li et al., 2024). The findings of this investigation are reinforced by studies out by Párraga Franco et al. (2021). It claims that the financial technology performance of MSMEs is significantly improved by financial technology.

Indonesia's digital economy context supports this finding, as the country is poised to reach \$90 billion in Gross Merchandise Value (GMV) in 2024, an increase of 13% since 2024 (Advisory, 2024). Furthermore, digital financial services have experienced strong growth. Digital payments grew 19% in 2024 and are expected to record a Gross Transaction Value (GTV) of \$404 billion. The positive impact demonstrates that fintech adoption enables Pariaman City MSMEs to access broader financial services, improve operational efficiency, and enhance overall business performance.

Simultaneous Impact of Financial Management and Financial Technology

The F -test results ($F = 18.933$, $p < 0.05$) confirm that financial management and financial technology collectively influence MSME performance. This finding is particularly relevant given current research indicating that digital adoption is no longer a question but a matter of urgency since a percentage of the world's interactions with banks now take place through digital channels (McKinsey & Company, 2023).

The combined effect suggests that successful MSMEs in Pariaman City benefit from integrating traditional financial management practices with modern technological solutions. This integration approach is consistent with Indonesia's digital transformation strategy outlined in the Digital Indonesia Roadmap 2021-2024.

Conclusion

Financial management significantly affects business performance, according to a study on MSMEs in Pariaman City. This emphasises how important sound financial management is to the success of any organisation. Accordingly, it has been demonstrated that financial technology significantly affects MSME performance, highlighting the critical role that digital financial solutions play in modern corporate operations. The impact of financial technology and financial management on MSME performance at the same time emphasises the value of integrated strategies that combine cutting-edge technological skills with conventional financial competencies. There is significant potential for performance improvement through improved financial management and technology adoption, according to the coefficient of determination ($R^2 = 0.281$), which suggests that other factors should be looked into in future studies.

Suggestion

The following are some pertinent recommendations that can be put into practice by different stakeholders in order to maximise the impact of financial management and financial technology in enhancing the performance of MSMEs in Pariaman City:

It is hoped that MSMEs in Pariaman City can separate business and personal finances to facilitate cash flow management, prepare a clear budget, and routinely conduct periodic evaluations so that the business runs smoothly.

It is hoped that MSME actors in Pariaman City can take part in trainings on business development held by the government, financial institutions, and the business community to improve business performance.

In order to identify further factors influencing MSMEs' performance, it is advised that the research region be extended beyond Pariaman City and that additional variables be included, such as digital marketing tactics.

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References:

- Al Mamun, A., Fazal, S. A., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance: A study of micro-enterprises in Kelantan, Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 29-48. <https://doi.org/10.1108/APJIE-11-2018-0067>
- Al Mamun, A., Ibrahim, M. D., Yusoff, M. N. H. Bin, & Fazal, S. A. (2018). Entrepreneurial leadership, performance, and sustainability of micro-enterprises in Malaysia. *Sustainability*, 10(5), 1591. <https://doi.org/10.3390/su10051591>
- Alkhawaldeh, B., Alhawamdeh, H., Al-Afeef, M., Al-Smadi, A., Almarshad, M., Fraihat, B., ... & Alaa, A. (2023). The effect of financial technology on financial performance in Jordanian SMEs: The role of financial satisfaction. *Uncertain Supply Chain Management*, 11(3), 1019-1030. <https://doi.org/10.5267/j.uscm.2023.4.020>
- Arshad, M. Z., & Arshad, D. (2019). Internal capabilities and SMEs performance: A case of textile industry in Pakistan. *Management Science Letters*, 9, 621-628. <https://doi.org/10.5267/J.MSL.2019.1.001>
- Badan Pemeriksa Keuangan Republik Indonesia. (2008). *Undang-Undang Republik Indonesia Nomor 20 Tahun 2008 tentang Usaha Mikro, Kecil, dan Menengah (UU No. 20 Tahun 2008)*. [Audit Board of the Republic of Indonesia. (2008). Law of the Republic of Indonesia Number 20 of 2008 concerning Micro, Small, and Medium Enterprises (Law No. 20 of 2008)]. Retrieved from: <https://peraturan.bpk.go.id/Details/39653/uu-no-20-tahun-2008>, Accessed on 13th April 2025.
- Evlogia Advisory. (13th November 2024). *e-Conomy SEA 2024 report: Indonesia's digital economy to hit \$90B GMV in 2024*. Retrieved from: <https://www.evlogiaadvisory.com/2024/11/13/e-conomy-sea-2024-report-indonesias-digital-economy-to-hit-90b-gmv-in-2024/>, Accessed on 13th April 2025.
- Gherghina, Ștefan C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 12(1), 347. <https://doi.org/https://doi.org/10.3390/su12010347>
- Gunawardane, G. (2023). Enhancing customer satisfaction and experience in financial services: a survey of recent research in financial services journals. *Journal of Financial Services Marketing*, 28(2), 255-269. <https://doi.org/10.1057/s41264-022-00148-x>
- Hanh, P. T. M. (2020). Factors Influencing on Human Resources Development in SMEs Service Enterprises in Industry 4.0: The Case of Thai Nguyen Province, Vietnam. *International Journal of Business, Economics and Management*, 7(3), 166–173. <https://doi.org/10.18488/journal.62.2020.73.166.173>
- Hunjra, A. I., Boubaker, S., Arunachalam, M., & Mehmood, A. (2021). How does CSR mediate the relationship between culture, religiosity and firm performance? *Finance Research Letters*, 39, 101587. <https://doi.org/10.1016/J.FRL.2020.101587>
- Ibidunni, A. S., Kolawole, A. I., Olokundun, M. A., & Ogbari, M. E. (2020). Knowledge transfer and innovation performance of small and medium enterprises (SMEs): An informal economy analysis. *Heliyon*, 6(8). <https://doi.org/10.1016/j.heliyon.2020.e04740>
- Le, T. T., & Ikram, M. (2022). Do sustainability innovation and firm competitiveness help improve firm performance? Evidence from the SME sector in vietnam. *Sustainable Production and Consumption*, 29,

588–599. <https://doi.org/10.1016/j.spc.2021.11.008>

Li, X., Ye, Y., Liu, Z., Tao, Y., & Jiang, J. (2024). FinTech and SME performance: Evidence from China. *Economic Analysis and Policy*, 81, 670-682. <https://doi.org/10.1016/j.eap.2023.12.026>

Mahmudova, L., & Katonáné Kovács, J. (2018). Definitining the performance of small and medium enterprises. *Network Intelligence Studies*, VI(12), 111–120. Retrieved from: https://seaopenresearch.eu/Journals/articles/NIS_12_5.pdf, Accessed on 12th January 2025.

Maianto, T., Sova, M., Zulaekah, Z., Setyowati, T. M., & Hernawan, M. A. (2024). Financial of Management: Concept, Success Indicators, and Evaluation (Literature Review). *Greenation International Journal of Economics and Accounting*, 2(2), 139-150. <https://doi.org/10.38035/gijea.v2i2.194>

Matare, P. G., & Sreedhara, T. N. (2020). Financial Management Practices and Growth of MSMEs of Tanzania. *Mudra: Journal of Finance & Accounting*, 7(1). <https://doi.org/10.17492/mudra.v7i1.195417>

McKinsey & Company. (24th October 2023). *Fintechs: A new paradigm of growth*. Retrieved from: <https://www.mckinsey.com/industries/financial-services/our-insights/fintechs-a-new-paradigm-of-growth>, Accessed on 25th April 2025.

Mendy, J. (2021). Performance management problem of four small and medium-sized enterprises (SMEs): towards a performance resolution. *Journal of Small Business and Enterprise Development*, 28(5), 690–710. <https://doi.org/10.1108/JSBED-06-2019-0201>

Muazu, S. S., Isah, M. I., Usman, S., & Duro, H. A. (2021). Influence of Entrepreneurial Orientation and Skills on the Performance of Small and Medium Enterprise (SMEs) in Kaduna Metropolis. *Fudma Journal of Management Sciences*, 2(2), 412-424. Retrieved from: <http://journal.fudutsinma.edu.ng/index.php/fjbm/article/view/2102>, Accessed on 25th April 2025.

Mutuku, A. K., Kiilu, B. N., Mathuku, P., & Auka, D. O. (2022). Effect of entrepreneurial skills on organizational performance of small and medium enterprises in Nakuru City-Kenya. *International Journal of Economics & Business Administration (IJEBA)*, 10(3), 156-173. Retrieved from: <https://ideas.repec.org/a/ers/ijebaa/vxy2022i3p156-173.html>, Accessed on 25th April 2025.

Mweshi, G. K., & Sakyi, K. (2020). Application of sampling methods for the research design. *Archives of Business Review–Vol*, 8(11), 180-193. <https://doi.org/10.14738/abr.811.9042>

Nafisa, S. K., Albaris, M. S., Agustina, D. R., Junianda, M., Izzania, T., & Nada, N. S. (2024). Peran Usaha-Usaha Kecil Di Palembang Terhadap Perekonomian Nasional [The Role of Small Businesses in Palembang in the National Economy]. *Journal of Economics and Business*, 2(1), 118–132. <https://doi.org/https://doi.org/10.61994/econis.v2i1>

Naradda Gamage, S. K., Ekanayake, E. M. S., Abeyrathne, G. A. K. N. J., Prasanna, R. P. I. R., Jayasundara, J. M. S. B., & Rajapakshe, P. S. K. (2020). A review of global challenges and survival strategies of small and medium enterprises (SMEs). *Economies*, 8(4), 79. <https://doi.org/https://doi.org/10.3390/economies8040079>

Ojo, O. V., & Nwaokike, U. (2018). Disruptive technology and the fintech industry in Nigeria: Imperatives for legal and policy responses. *Gravitas Review of Business and Property Law*, 9(3). <https://dx.doi.org/10.2139/ssrn.3306164>

Pandey, M. K., & Sergeeva, I. G. (2022). Paradigm shift in fintech landscape: a perspective from the Indian marketplace. *Научный журнал НИУ ИТМО. Серия «Экономика и экологический менеджмент»*, (2), 142-151. <https://doi.org/10.17586/2310-1172-2022-16-2-142-151>

Párraga Franco, S. M., Pinargote Vázquez, N. F., García Álava, C. M., & Zamora Sornoza, J. C. (2021). Financial management indicators in small and medium-sized companies in Ibero-America: a systematic review. *Dilemas Contemporáneos: Educación, Política y Valores*, 8(spe2). <https://doi.org/10.46377/dilemas.v8i.2610>

- Sana, A. K., Poddar, S., & Paul, B. (2020). Contribution of small and medium enterprises (SMES) towards Malaysian economic growth: an empirical study. *International Journal on Recent Trends in Business and Tourism (IJRTBT)*, 4(2), 18-27. Retrieved from: <https://ejournal.lucp.net/index.php/ijrtbt/article/view/1030>, Accessed on 12th April 2025.
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39-42. <https://doi.org/10.12691/ajams-8-2-1>
- Suindari, N. M., & Juniariani, N. M. R. (2020). Pengelolaan Keuangan, Kompetensi Sumber Daya Manusia Dan Strategi Pemasaran Dalam Mengukur Kinerja Usaha Mikro Kecil Menengah (Umkh). *KRISNA: Kumpulan Riset Akuntansi*, 11(2), 148–154. <https://doi.org/10.22225/kr.11.2.1423.148-154>
- Thathsarani, U. S., & Jianguo, W. (2022). Do digital finance and the technology acceptance model strengthen financial inclusion and SME performance?. *Information*, 13(8), 390. <https://doi.org/10.3390/info13080390>
- Veronica, S., Manlio, D. G., Shlomo, T., Antonio, M. P., & Victor, C. (2020). International social SMEs in emerging countries: Do governments support their international growth? *Journal of World Business*, 55(5), 100995. <https://doi.org/10.1016/j.jwb.2019.05.002>
- Widjanarko, W., Hidayat, W. W., Prasetyo, E. T., & Eprianto, I. (2022). The Effect of Financial Literacy on the Financial Management of MSMEs in Jatinangor District, Sumedang Regency. *Enrichment: Journal of Management*, 12(5), 3359-3364. Retrieved from: <https://www.enrichment.iocspublisher.org/index.php/enrichment/article/view/826/646>, Accessed on 12th April 2025.
- Yadewani, D. (2024). Analysis of Intrinsic Work Motivation in Improving Employee Performance in Dapoer Rendang Riri MSME. *Advancement in Management and Technology (AMT)*, 5(2), 22-29. <https://doi.org/10.46977/amt.2024.v05i02.003>
- Yadewani, D., Durai Pandi, O., & Rahayu, S. (2024). Knowledge, Skills, and Ability on SME Performance: A Systematic Literature Review. *International Journal of Management and Human Sciences*, 08(01), 42–51. <https://doi.org/10.31674/mjmr.2024.v08i01.004>
- Yadewani, D., Duraipandi, O., Khor, L., Sefnedi, & Tio, L. (2023b, August). The factors influencing SMEs performance with special reference to innovation and technology. In AIP Conference Proceedings (Vol. 2854, No. 1, p. 020001). AIP Publishing LLC. <https://doi.org/10.1063/5.0165500>
- Zighan, S., Abualqumboz, M., Dwaikat, N., & Alkalha, Z. (2022). The role of entrepreneurial orientation in developing SMEs resilience capabilities throughout COVID-19. *The International Journal of Entrepreneurship and Innovation*, 23(4), 227–239. <https://doi.org/https://doi.org/10.1177/14657503211046849>
- Zutshi, A., Mendy, J., Sharma, G. D., Thomas, A., & Sarker, T. (2021). From challenges to creativity: enhancing SMEs' resilience in the context of COVID-19. *Sustainability*, 13(12), 6542. <https://doi.org/10.3390/su13126542>