



Determining Financial Performance with Financial Literacy as a Mediating Variable for SMES in Lhokseumawe

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ABSTRACT

Using financial literacy as a mediating variable, the research examines the impact of financial capital, accounting knowledge, and financial technology on the financial performance of Micro, Small, and Medium-Sized Enterprises (MSMEs) in Lhokseumawe. Using a sample of 99 MSME entrepreneurs obtained by using the Slovin algorithm, the research uses primary data out of a population of 6,848 MSMEs. Data were analyzed using SmartPLS 4 following a structural model (Structural Equation Modeling, or SEM). Results confirm that financial performance is positively and significantly affected by financial capital, financial technology, and financial literacy. In the meantime, financial performance is negatively and insignificantly impacted by accounting knowledge. Besides, the impact of financial capital and financial technology on financial performance is significantly and positively mediated by financial literacy. However, it does not mediate the effect of accounting knowledge on financial performance. This suggests that while accounting knowledge is important, its impact on the financial performance of MSMEs is relatively minor. These results underscore the crucial role of financial literacy in enhancing the relationship between financial factors and MSME performance.

Keywords: Financial Capital, Accounting Knowledge, Financial Technology, Financial Literacy, Financial Performance.

1. Introduction

Indonesia is strategically located geographically, which has resulted in abundant natural resources and a rich cultural heritage. This environment has fostered the growth of Micro, the expansion of MSMEs (micro, small, and medium-sized businesses).

Micro, Small, and Medium Enterprises (MSMEs) are one of the most important pillars of a nation's economy. MSMEs are a tangible example of the creative industry, whose management relies on the creative ideas and insights of business owners.

which are vital pillars supporting the national economy. Lhokseumawe is one of the industrial cities in Aceh Province, experiencing continuous development in the MSME sector. According to data from the Office of Trade, Cooperatives, and MSMEs (DISPRINDAGKOP) of Lhokseumawe in 2023, there are 6,848 MSMEs that employ approximately 18,187 individuals, contributing around 50% to the Gross Domestic Product (PDRB) of Lhokseumawe.

Table 1 Number of SMEs in Lhokseumawe

SME Sector	Business Sector	Quantity
Micro	Trade	2,490
	Agriculture	92
	Industry	3,750
	fisheries	44
	Transportation	15
	farm	47
Small	Trade	275
	Agriculture	1
	Industry	43
	fisheries	7
Medium	Transportation	23
	Trade	47

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Industry	1
Transportation	12
quantity amount	6.848

Source: Department of Trade, Industry, Cooperatives and MSMEs, 2023

Based on the table above, the largest number of MSMEs is in the industrial sector; however, this study focuses on MSMEs in the trade sector. This choice is due to Lhokseumawe's dominance in trade-related MSMEs, including culinary, services, agribusiness, creative industries, and fashion. Additionally, the decision to focus on this sector is based on the significant contribution of a diverse and dynamic group of MSME actors. MSMEs in Lhokseumawe face significant challenges in business management, particularly concerning financial issues. Key obstacles include limited financing, business management capabilities, human resource skills, and marketing strategies (Mulyanti and Nurhayati, 2022).

Based on initial observations of MSMEs in Lhokseumawe City, the current phenomenon is that despite the large revenues of MSMEs in Lhokseumawe City in general, many MSMEs still experience financial weaknesses. One of the main issues of concern is weak financial performance. This is due to a lack of proper financial management and low financial literacy, which impacts suboptimal business decision-making.

2. Literature Review

The Resource-Based View (RBV) is a managerial performance framework used to achieve competitive advantage by leveraging a company's resources and strategies (Maryono et al., 2020). This theory describes how a company can attain competitive superiority by relying on its resources, thereby enabling sustainable continuous growth.

Micro, small, and medium enterprises (UMKM) are independent businesses operated by individuals. UMKM play a significant role in supporting the national economy, making it important for stakeholders to focus on consistently developing resilient national UMKM actors (Bashori and Moerdijat, 2023). Financial performance is a key determinant of a business's success in achieving its goals over a specific period. It reflects the company's financial management capabilities and demonstrates its overall performance (Rengganis Oktalia et al., 2020). Additionally, Sularsih et al. (2023) state that stable financial performance is an indicator of a company's ability to manage its finances effectively.

Financial performance is a key determinant of a business's success in achieving its goals over a specific period. It reflects the company's financial management capabilities and demonstrates its overall performance (Rengganis Oktalia et al., 2020). Additionally, Sularsih et al. (2023) state that stable financial performance is an indicator of a company's ability to manage its finances effectively. Furthermore, financial capital is crucial for the behavior of UMKM, as capital represents the funds needed to acquire resources that enhance wealth (Ferdiansyah and Bukhari, 2021). Accounting knowledge constitutes the accurate information related to the recording, classification, and summarization of financial transactions, which supports sound decision-making within an UMKM (Senolangi et al., 2024).

Lastly, financial technology refers to the services provided to the financial industry that utilize digital technology in the form of software. This plays a vital role in the financial performance of UMKM. Financial technology can generally be seen as a technical advancement in financial transaction services (Alifah, 2022).

The following are factors that, according to Khuong et al., (2022), influence Financial Technology; Performance Expectancy: The user's level of confidence that using a technology or system will improve their performance in achieving specific goals (1), Effort Expectancy: The perceived ease of use experienced by users when using a technology or system (2), Social Influence: The influence of the social environment (friends, colleagues, superiors) that encourages someone to use a particular technology or system, and Favorable Conditions: The existence of resources and support that enable a person to use a technology or system without difficulty.

3. Research Methodology

Based on the variables of the study, the research method used in this study is quantitative research. This method is employed to investigate a population or sample and analyze the data. The data sources used in this study are primary data, which were collected through a questionnaire distributed directly to SMEs in Lhokseumawe City. This research was conducted to obtain data related to the research subjects, namely financial capital, accounting knowledge, financial technology, financial literacy, and financial performance.

In analyzing the research problem, the population targeted in this study consists of all SMEs in Lhokseumawe, totaling 6,848 businesses. The sampling technique employed for this research is purposive sampling, which is based on the specific population. Using Slovin's formula, this study determined that 99 SMEs would serve as respondents.

Data management in this research utilizes SmartPLS 4 software. The data analysis method employed is structural model analysis, which examines the influence of financial capital and accounting knowledge on financial performance, along with the role of financial literacy as a mediating variable in the financial performance of SMEs.

A data collection technique that involves providing a series of written questions or statements to respondents. This research questionnaire contains two types of statements/questions: (1) statements related to the measurement of research variables; (2) questions related to respondent data. Questionnaires can be structured based on a sequence of statements/questions and provide answers in the form of a scale, with answers tailored to the statements/questions, making it easier for respondents to answer and avoiding bias. The questionnaire given to respondents is measured using a Likert scale consisting of five statements ranging from "Strongly Agree" to "Strongly Disagree," with each answer assigned a weighted value.

Analysis Partial Least Square (PLS)

Partial least squares analysis is a method developed to build models and estimate path models using latent variables with multiple indicators. Partial least squares (PLS) analysis is considered the most suitable for forecasting, especially in situations where the indicators are formative.

Partial least squares (PLS) analysis is the tool the author will use in this study, examining the interpretation of the measurement model (outer model) and structural analysis (inner model). The measurement model in this study is a reflective-reflective second-order factor. Second-order factors are construct measurement models measured by a number of variables and mediated by a number of first-order factors or dimensions.

Outer Model

The outer model is also called the outer relation or measurement model, which aims to describe which indicators have a dominant influence as a direct measure of the latent variable. To measure validity and reliability, as explained below:

- a. Convergent validity is the factor loading value of a latent variable with its indicators. The expected value is >0.7 , indicating that the indicator has a strong correlation with the construct. This indicates that the indicator is able to represent the construct well.
- b. Discriminant validity is the cross-factor loading value, which is useful for determining whether a construct has adequate discriminant power. This is done by comparing the value of the target construct with the value of the other construct.
- c. Composite reliability is a measurement that indicates that if the reliability value is >0.7 , the construct has high reliability and is considered good.
- d. Average Variance Extracted (AVE) is the average variance of at least 0.5. Cronbach's alpha is a calculation to prove composite reliability results, with a minimum value of 0.6. However, for stronger results, it should be above 0.

Outer model analysis

The outer model analysis aims to ensure that the measurement instrument used meets the required validity and reliability criteria. This process identifies the relationship between latent variables and their indicators. The results of the outer loading test for the Lower Order Construct (LOC) in this study can be seen in the figure below.

- a. Convergent validity is the factor loading value of a latent variable with its indicators.
- b. Discriminant validity is the cross-loading factor value that is useful in determining whether a construct has adequate discriminant properties.
- c. Composite reliability is a measurement if the reliability value is > 0.7 then the construct value has a high reliability value and considered good.
- d. Average Variance Extracted (AVE) is the average variance of at least 0.5. Cronbach's alpha is a calculation to demonstrate composite reliability, with a minimum value of 0.6. However, for stronger results, it should be above 0.7.

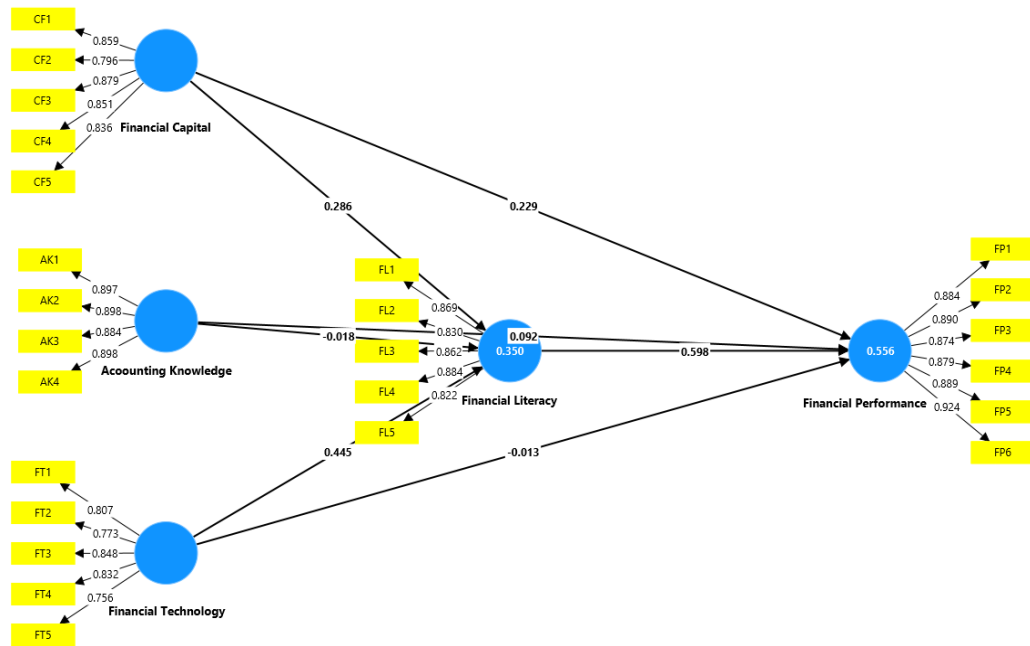
Inner Model

The structural method (inner model), also known as the inner relation structural model, specifies the relationship between latent variables, namely between exogenous and endogenous variables. This is then followed by measuring the model's predictive ability using the following three criteria:

- a. *Variance inflation factor* (VIF) Tolerance measures the variability of the selected independent variable that is not explained by the other independent variables. A low tolerance value equates to a high VIF (because $VIF = 1/\text{tolerance}$).
- b. *Koefisien determinasi* (R^2) is a way to assess how much an endogenous construct can be explained by an exogenous construct.
- c. *Effect Size* (F^2) To determine the goodness-of-fit of the model, interpret the effect size (F^2) or f-square value: 0.02 indicates a small effect, 0.15 indicates a moderate effect, and 0.35 indicates a large effect at the structural level.\

4. Results and Discussion

In testing the hypotheses, Partial Least Squares Structural Equation Modeling (PLS-SEM) is used to evaluate the significance of relationships between variables, which involves a bootstrapping procedure.



Outer loadings Lower Order Construct (LOC)

The results are assessed based on t-statistic values or p-values, with correlations between variables considered significant if the t-statistic is greater than 1.96 or if the p-value is less than 0.10

Hypothesis Test

Table 2 Bootstrapping

Variables	Model 1		Model 2		Model 3	
	Koef	T-stat	Koef	t-stat	Koef	t-stat
CF > FP	0,400	(2,841) ***				
AK > FP	0,081	0,689				
FT > FP	0,253	(2,478) ***				
FL > FP			0,598	(4,203) ***		
CF > FL			0,286	(2,088) **		
AK > FL			-0,018	0,184		
FT > FL			0,445	(4,419) ***		
CF > FL > FP					0,171	(1,991) **
AK > FL > FP					-0,011	0,187
FT > FL > FP					0,266	(3,088) ***

Description: Significant levels are marked with ***, **, *, which are significant at the 1%, 5% and 10% levels.

Based on the results of the hypothesis test in Table 4.25 above, the influence between the variables based on SEM analysis using the smart-PLS approach is as follows:

1. H1: The influence of Financial Capital (CF) on Financial Performance (FP) has a t-statistic of 2.841 > 1.96 or a p-value of 0.005 < 0.10, and a path coefficient of 0.400, indicating that Financial Capital has a positive and significant influence at the 1% level.

2. H2: The influence of Accounting Knowledge (AK) on Financial Performance (FP) has a t-statistic of 0.689 < 1.96 or a p-value of 0.491 > 0.10, and a path coefficient of 0.081, indicating that accounting knowledge has a positive and insignificant influence.
3. H3: The influence of Financial Technology (FT) on Financial Performance (FP) has a t-statistic of 2.478 > 1.96 or a p-value of 0.013 < 0.10, and a path coefficient of 0.081. A coefficient of 0.253 indicates that financial technology has a positive and significant influence at the 1% level.
4. H4: the influence of Financial Literacy (FL) on Financial Performance (FP), has a t-statistic of 4.203 > 1.96, or a p-value of 0.000 < 0.10, and a path coefficient of 0.598, indicating that financial literacy has a positive and significant influence at the 1% level.
5. H5: the influence of Financial Capital (CF) on Financial Literacy (FL), has a t-statistic of 2.088 > 1.96, or a p-value of 0.037 < 0.10, and a path coefficient of 0.286, indicating that Financial Capital has a positive and significant influence at the 5% level.
6. H6: The influence of Accounting Knowledge (AK) on Financial Literacy (FL) has a t-statistic of 0.184 < 1.96 or a p-value of 0.854 > 0.10, and a path coefficient of -0.018, indicating that accounting knowledge has a negative and insignificant influence.
7. H7: The influence of Financial Technology (FT) on Financial Literacy (FL) has a t-statistic of 4.419 > 1.96 or a p-value of 0.000 < 0.10, and a path coefficient of 0.445, indicating that financial literacy has a positive and significant influence at the 1% level.
8. H8: The effect of Financial Capital (CF) mediated by Financial Literacy (FL) on Financial Performance (FP) has a t-statistic of 1.991 > 1.96, or a p-value of 0.046 < 0.10, and a path coefficient of 0.171. This means that Financial Capital, mediated by financial literacy, has a positive and significant effect on financial performance at the 5% level.
9. H9: the effect of Accounting Knowledge (AK) mediated by Financial Literacy (FL) on Financial Performance (FP), has a t-statistic of 0.187 < 1.96, or a p-value of 0.852 < 0.10, and a path coefficient of -0.011. This means that accounting knowledge mediated by financial literacy has a negative and insignificant effect on financial performance.
10. H10: the effect of Financial Technology (FT) mediated by Financial Literacy (FL) on Financial Performance (FP), has a t-statistic of 3.088 > 1.96, or a p-value of 0.002 < 0.10, and a path coefficient of 0.266. This means that financial technology mediated by financial literacy has a positive and significant effect on financial performance at the 1% level.

ANALYSIS

Impact of Financial Capital on Financial Performance

According to the research findings, financial capital has a p-value of less than 0.10, a t-statistic of 2.841, and a coefficient value of 0.400. Thus, H1 is accepted in this study. At the 1% level, this result shows that financial capital significantly and favorably affects financial performance. To put it another way, SMEs in Lhokseumawe do better financially when they have more financial capital.

These results are in line with research conducted by Anindyastri et al., (2022), states that the implementation of financial technology contributes to improving financial performance, meaning that optimal use of financial technology can be an effective strategy in supporting the growth and financial sustainability of MSMEs.

Impact of Accounting Knowledge on Financial Performance

The results of the hypothesis testing concluded that the coefficient value of accounting knowledge was 0.081, with a t-statistic of 0.689 and a p-value greater than 0.10. Thus, it can be stated that accounting knowledge has a positive but insignificant effect on financial performance, so H2 is rejected. This shows that accounting knowledge has not provided a significant effect on the financial performance of SMEs in Lhokseumawe.

Although the average accounting knowledge score was 4.13 on a scale of 5, indicating a relatively high level of knowledge, this result is more indicative of mastery of the declarative aspect. This means that MSMEs understand accounting theory but are unable to implement it optimally in business practice. This means that the impact of accounting knowledge on financial performance has not been significantly felt. Furthermore, the limited use of financial reports in decision-making is also a factor. Many MSMEs do not prepare financial reports regularly or still mix personal and business finances. Furthermore, an irrelevant educational background also limits their ability to apply accounting effectively.

Impact of Financial Technology on Financial Performance

A p-value of less than 0.10, a t-statistic of 2.478, and a coefficient value of 0.253 indicate that financial technology significantly and favorably affects financial performance. H3 is therefore approved. This suggests that SMEs in Lhokseumawe can improve their financial performance through the efficient use of financial technology.

The application of financial technology contributes to improving financial performance, meaning that optimal use of financial technology can be an effective strategy to support the growth and financial sustainability of MSMEs.

Impact of Financial Literacy on Financial Performance*

The study shows that financial literacy positively and significantly influences financial performance, with a coefficient value of 0.589 and a t-statistic of 4.203 (p-value < 0.10). Thus, Hypothesis H4 is accepted. This means that when SMEs improve their financial literacy, it can serve as an effective strategy to enhance their financial performance and sustain their businesses.

Impact of Financial Capital on Financial Literacy

According to the findings, financial capital positively and significantly affects financial performance, with a coefficient value of 0.286 and a t-statistic of 2.088. In other words, Hypothesis H5 is accepted. This implies that better management of financial capital correlates with improved financial performance.

Impact of Accounting Knowledge on Financial Literacy

The results of Model 2 reveal that the coefficient for the accounting knowledge variable is -0.018, with a t-statistic of -0.184 and a p-value greater than 0.10. This indicates that accounting knowledge has a negative and insignificant effect on financial literacy. Therefore, while SMEs may have a basic understanding of accounting, it is not sufficient for mastering practical skills in preparing, reading, and utilizing financial statements to make informed financial decisions.

Impact of Financial Technology on Financial Literacy

Based on the coefficient value of financial technology at 0.445, with a t-statistic of 4.419 and a p-value less than 0.10 (Model 2), it shows that financial technology has a positive and significant effect on financial literacy, leading to the acceptance of hypothesis H7. This means that broader utilization of financial technology can be an important factor in enhancing the understanding and financial skills of business actors.

The Role of Financial Literacy in Mediating the Relationship between Financial Capital and Financial Performance

According to Model 3, the interaction coefficient between financial capital and financial literacy is 0.171, with a financial performance p-value of less than 0.10. This indicates that financial literacy mediates the relationship between financial capital and financial performance at a significance level of 5%, thus accepting hypothesis H8. Small and Medium Enterprises (SMEs) need to improve their financial literacy to make informed financial decisions and enhance their financial performance. This implies that increasing financial literacy can strengthen the relationship between financial capital and financial performance, helping SMEs manage their financial resources more effectively.

The Role of Financial Literacy in Mediating the Relationship between Accounting Knowledge and Financial Performance

The research findings indicate that the interaction coefficient between accounting knowledge and financial literacy is -0.011, with a financial performance p-value greater than 0.10 (Model 3), showing that financial literacy does not mediate the negative and insignificant influence of accounting knowledge on financial performance. Therefore, hypothesis H9 is rejected. One primary reason for this insignificance is that the accounting knowledge possessed by entrepreneurs tends to be declarative or theoretical. Additionally, the aspects of financial literacy, which include knowledge, skills, behavior, and attitudes, have not effectively strengthened the role of accounting knowledge.

The Role of Financial Literacy in Mediating the Relationship between Financial Technology and Financial Performance

The coefficient obtained from financial technology in relation to financial literacy is 0.266, with a financial performance p-value less than 0.10 and a t-statistic of 3.088. This indicates that financial literacy mediates the positive and significant influence of financial technology on financial performance, with significance at the 1% level. The findings suggest that as financial literacy increases, financial technology will have a positive effect on financial performance.

5. Conclusion and Recommendations

Based on the tests conducted, the following conclusions can be drawn:

1. Financial capital has a positive and significant impact on the financial performance of SMEs (Small and Medium Enterprises) in Lhokseumawe. This shows that sufficient capital availability can improve the financial performance of SMEs.
2. Accounting knowledge has a positive but insignificant effect on the financial performance of SMEs in Lhokseumawe. Although there is some understanding of accounting, its impact on the financial performance of SMEs remains limited.
3. Financial technology has a positive and significant effect on the financial performance of SMEs in Lhokseumawe. This indicates that the proper implementation of financial technology can enhance the financial performance of SMEs.
4. Financial literacy has a positive and significant impact on the financial performance of SMEs in Lhokseumawe. This identifies that higher levels of financial literacy will contribute to improved financial performance in SMEs.

5. Financial capital has a positive and significant effect on financial literacy among SMEs in Lhokseumawe. This indicates that the financial resources available to SMEs can encourage a better understanding of financial management.
6. Accounting knowledge has a negative and insignificant effect on financial literacy among SMEs in Lhokseumawe. This indicates that accounting knowledge does not necessarily enhance their financial literacy.
7. Financial technology has a positive and significant effect on financial literacy among SMEs in Lhokseumawe. This implies that the use of financial technology can improve SME operators' understanding of financial management.
8. The relationship between financial capital and financial performance, mediated by financial literacy, has a positive and significant impact on SMEs in Lhokseumawe. This means that adequate financial capital can enhance financial performance through increased financial literacy.
9. The relationship between accounting knowledge and financial performance, mediated by financial literacy, shows a negative and insignificant effect on SMEs in Lhokseumawe. This suggests that even with accounting knowledge, its influence on financial performance through financial literacy is not significant.
10. The relationship between financial technology and financial performance, mediated by financial literacy, has a positive and significant impact on SMEs in Lhokseumawe. This identifies that financial technology can improve the financial performance of SMEs through strengthened financial literacy.

Based on the research findings, discussions, and conclusions, the following recommendations can be made:

1. For SME practitioners: To improve their financial performance, it is essential to enhance their income and manage their finances more effectively to ensure the sustainability of their businesses.
2. For future researchers: It is suggested to build upon this study by incorporating additional variables that may influence the financial performance of SMEs.

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