

"The Influence of SIA, Education Level, Business Length, and Credit Provision on the Financial Performance of MSME Cafe"

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Abstract

The purpose of this study is to analyze the influence of the Accounting Information System (SIA), education level, length of business, and credit provision on the financial performance of MSME cafes in Nganjuk Regency. This study uses an explanatory quantitative method used in 136 MSME café units, with data collected through questionnaires. The results of the analysis showed that the value of F calculated $8.010 > F \text{ table } 2.44$ and the significance of $0.000 < 0.05$, indicating that the four independent variables had a significant effect on financial performance. These findings affirm the importance of good SIA management, the education level of business actors, length of business, and access to credit in improving financial performance. It is recommended that MSME actors utilize information technology and strengthen financial management to remain competitive in the digital era.

Keywords: SIA, Education Level, Business Length, Credit, MSMEs, Cafe

INTRODUCTION

MSME cafes in Nganjuk Regency play an important role in the regional economy because they are able to absorb labor and support local economic growth. However, its development still faces a number of obstacles that have an impact on financial performance. Some of the main problems include the implementation of the Accounting Information System (SIA) which is not optimal because there are still many cafes using manual recording, the low quality of human resources and the level of education of managers, the difficulty of new cafes to compete and maintain business consistency, and obstacles in accessing banking credit due to invalid financial statements and complicated requirements. In addition, the results of previous research on the influence of SIA, education level, length of business, and credit on the financial performance of MSMEs showed different findings, causing a

research gap. This condition makes it important to conduct further research to empirically test the relationship between these variables on the financial performance of cafe MSMEs in Nganjuk Regency. This research is expected to make a real contribution to the development of strategies to improve financial performance, as well as become valuable input for MSME actors, financial institutions, local governments, and academics.

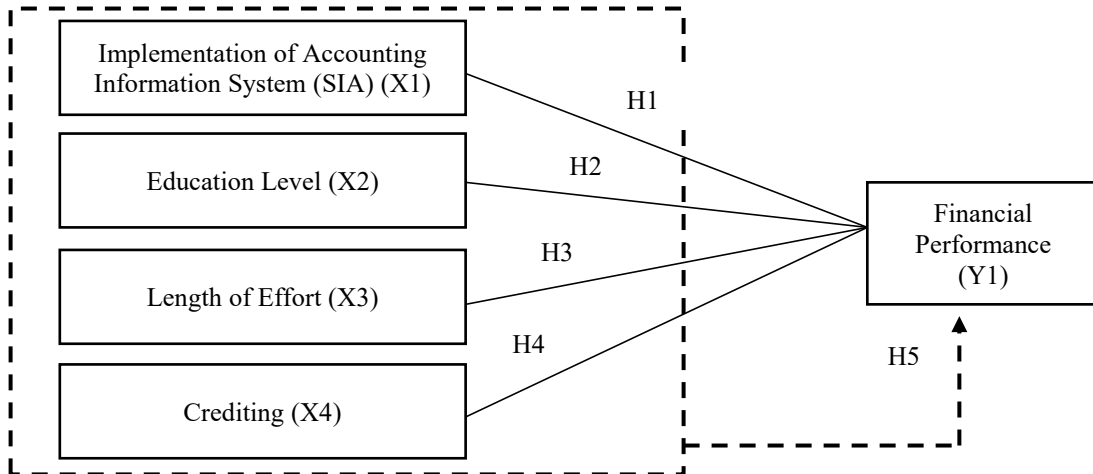
Previous research on the influence of SIA, education level, length of business, and credit on the financial performance of MSMEs still shows mixed results. Some studies found a significant positive effect, while others showed no significant association. These differences in findings create research gaps that need to be studied further, especially in the context of café MSMEs that have different characteristics from other sectors. Based on these conditions, this study focuses on analyzing the influence of SIA implementation, education level, business duration, and credit on the financial performance of MSME cafes in Nganjuk Regency. The results of this research are expected to make a real contribution to MSME actors in improving business management strategies, for financial institutions in assessing creditworthiness, and for local governments in formulating MSME development policies that are more targeted.

LITERATURE REVIEW

Agency Theory

Agency Theory, developed by Jensen and Meckling (1976), discusses the relationship between the principal (café owner) and the agent (café manager or manager). In the context of MSME cafes, often the owner also acts as a manager, but if there is a separation of roles, this theory highlights how accurate and transparent accounting information (such as financial statements generated from the Accounting Information System) can reduce information asymmetry and monitor agent performance, thus aligning with the main goal of achieving optimal financial performance.

Conceptual Framework



The Influence of Accounting Information Systems on the Financial Performance of MSMEs

The implementation of the Accounting Information System (SIA) in cafes involves the use of cashier software such as POS, Accurate, which is integrated with accounting modules. The Accounting Information System (SIA) converts transaction data into structured, accurate, and ready-to-use financial information for management and external parties, to support operational efficiency and strategic decision-making in cafes.

H₁: There is a significant influence of the Implementation of the Accounting Information System (SIA) on the financial performance of MSME Cafes in the Nganjuk Regency area.

The Influence of Education Level on the Financial Performance of MSMEs

Educated employees are quicker to adopt SIA, which allows for more efficient and accurate recording of transactions. With educated employees/managers, the presence of a café that has experienced an increase in revenue by 20% and a reduction in operational costs by 15% shows that employee education contributes positively to the financial performance of the café.

H₂: There is a significant influence of the level of education/employees on the financial performance of MSME cafes in the Nganjuk Regency area.

The Influence of Business Length on the Financial Performance of MSMEs

Cafes that operate longer often show better financial performance, such as increased revenue and profitability. Entrepreneurs can record steady growth in

their financial statements, with operational efficiencies, cost savings and customer loyalty.

H₃: There is a significant influence of the length of business on the financial performance of cafe MSMEs in the Nganjuk Regency area.

The Effect of Credit on the Financial Performance of MSMEs

Cafes can enter into agreements with suppliers to obtain raw materials on the condition of credit payment, such as payment within 30 – 60 days after delivery. This helps cafes better manage cash flow, allowing café entrepreneurs to use existing funds for other operational purposes

H₄: There is a significant influence of lending on the financial performance of cafe MSMEs in the Nganjuk Regency area.

Simultaneous Influence on MSME Financial Performance

The combination of these factors creates a resilient and adaptive business ecosystem, enabling café MSMEs to overcome challenges, seize opportunities, and achieve consistent profit growth and operational sustainability in the long term.

H₅: There is a significant influence simultaneously (everywhere) from the implementation of the Accounting Information System (SIA), education level, length of business, and provision of credit on the financial performance of MSME cafes in the Nganjuk Regency area.

RESEARCH METHODS

Research Design

The researcher uses the quantitative research approach as a plan or overall structure, with a quantitative research design with an explanatory research approach. The population is 136 units of MSME cafes in Nganjuk Regency. A total of 136 samples were selected using the "*non probability sampling*" technique with saturated sampling technique.

VARIABLES AND INSTRUMENTS

Independent Variables:

1. X₁: Implementation of Accounting Information System (SIA) (5 indicators)
2. X₂: Education Level (5 indicators)
3. X₃: Length of Effort (5 indicators)
4. X₄ : Giving Credit (5 indicators)

Dependent variable:

1. Y: MSME Financial Performance as a Dependent Variable (5 indicators)

Instruments

The research instrument is in the form of a questionnaire with a 5-point Likert scale:
(1) Strongly Disagree – (2) Disagree – (3) Hesitate – (4) Agree – (5) Strongly Agree

DATA ANALYSIS TECHNIQUES

The data was analyzed using:

- Validity test ($r_{\text{count}} > r_{\text{table}}$)
- Reliability test (Cronbach's Alpha > 0.60)
- Classical assumption test (normality, multicollinearity, heteroscedasticity, autocorrelation)
- Multiple linear regression
- Hypothesis test (t-test and F-test)

RESULTS AND DISCUSSION

VALIDITY AND RELIABILITY TEST

All questionnaire items were declared valid because the r value was calculated $> r$ of the table (0.129). Cronbach's Alpha Score:

- Implementation of Accounting Information System (SIA) (X_1): 0.811
- Education Level (X_2): 0.746
- Length of Operation (X_3): 0.757
- Credit Granting (X_4): 0.747
- Financial Performance (Y): 0.793

All values > 0.70 , so the instrument is reliable.

CLASSIC ASSUMPTION TEST

Normality: Normally distributed residual (Kolmogorov-Smirnov test).

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		136
Normal Parameters ^a	Mean	.0000000
	Std. Deviation	2.15911493
Most Extreme Differences	Absolute	.067
	Positive	.031
	Negative	-.067
Kolmogorov-Smirnov Z		.782
Asymp. Sig. (2-tailed)		.574

Based on the table above, it can be interpreted that the value of Asymp. Sig. (2-tailed) is 0.574. This shows that the Sig. (2-tailed) value is greater than 0.05, so it can be concluded that the residual data of the study is normally distributed.

Multicollinearity: VIF value < 10, multicollinearity does not occur.

Coefficients ^a								
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.915	2.953		.649	.518		
	SISTEM INFORMASI AKUNTANSI	.215	.075	.227	2.885	.005	.993	1.007
	TINGKAT PENDIDIKAN	.252	.073	.270	3.435	.001	.994	1.006
	LAMA USAHA	.178	.077	.182	2.303	.023	.985	1.015
	PEMBERIAN KREDIT	.185	.078	.188	2.384	.019	.985	1.015

a. Dependent Variable: KINERJA KEUANGAN

Based on table 4.5 above, it can be interpreted that the tolerance value of all variables is > 0.9 and VIF < 10.00. Therefore, it can be concluded that all of the above variables do not have symptoms of multicollinearity

Heteroscedasticity: Residual scatterplots spread randomly, no pattern.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.733	1.696		1.021	.309
	SISTEM INFORMASI AKUNTANSI	.050	.043	.100	1.161	.248
	TINGKAT PENDIDIKAN	-.014	.042	-.029	-.343	.732
	LAMA USAHA	-.083	.044	-.161	-1.871	.064
	PEMBERIAN KREDIT	.054	.045	.104	1.213	.227

Based on table 4.6 above, it can be interpreted that the variables of the Accounting Information System (SIA), education level, length of business and credit provision have a Sig. value of > 0.05. This means that in all variables there were no symptoms of heteroscedasticity.

Multiple Linear Regression Results

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.925	4	38.481	8.010	.000
	Residual	629.340	131	4.804		
	Total	783.265	135			

Based on table 4.7 of the results of the F test, the F value of 8.010 ≥ F of the table (2.44), and the significance value (Sig.) of 0.000 < α (0.05). Therefore, it can be concluded that the variables of the Implementation of the Accounting Information

System (SIA), Education Level, Business Length, and Credit Provision simultaneously (together) have a dignified effect on the Financial Performance of MSMEs.

Regression equations:

$$Y=0.581+0.005X_1 +0.001X_2 + 0.023X_3 + 0.019X_4$$

Coefficient Interpretation:

Constant (0.581): If all variables are zero, the financial performance is 0.581.

- X_1 (0.005): Sig. 0.005 < 0.05, SIA has a significant effect on financial performance (H1 accepted).
- X_2 (0.001): Sig. 0.001 < 0.05, Education has a significant effect on financial performance (H2 accepted).
- X_3 (0.023): Sig. 0.023 < 0.05, Length of business has a significant effect on financial performance (H3 accepted)
- X_4 (0.019): Sig. 0.019 < 0.05, Credit has a significant effect on financial performance (H4 accepted).

HYPOTHESIS TEST RESULTS

VARIABLE	T COUNT	T TABLE	SIG.	INFORMATION
ACCOUNTING INFORMATION SYSTEM	2,885	1,987	0,005	Significant (H₁ accepted)
EDUCATION LEVEL	3,435	1,987	0,001	Significant (H₂ accepted)
LONG EFFORT	2,303	1,987	0,023	Significant (H₃ accepted)
CREDIT GRANTING	2,384	1,987	0,019	Significant (H₄ accepted)

Test F (Simultaneous):

F count = 8.010; Sig. = 0.000 < 0.05 → Significant simultaneously.

- Implementation of Accounting Information System: Has a strong effect because an accurate and integrated Accounting Information System (SIA) can speed up the process of financial recording and reporting, increase efficiency, and provide a more appropriate decision-making basis for management. These findings support the research of Ardiani et al., (2024), Amalia, (2023) and Ate et al., (2022)

- **Education Level:** The higher the education level of the respondent (in this case a business actor or financial manager), the better the financial performance achieved. These findings are consistent with the research of Nurchayati & Budiman, (2023) and the research of Aullah et al., (2022).
- **Business Duration:** The longer a business runs, it tends to have better financial performance. These findings support Erawati & Setyaningrum, (2021) and support the research of Puspartini & Sulindawati, (2024).
- **Credit:** The better the credit mechanism implemented, the better the financial performance produced. These findings support Ate et al., (2022) and support the research of Ernitawati, Y., & Yani, (2025).

Determination Coefficient Test Results

Type	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0,443	0,197	0,172	2,192

Based on table 4.9, the R Square value of 0.197 or 19.7% was obtained, which shows that there is a significant influence between the independent variable (X) and the dependent variable (Y) of 19.7% and the remaining 80.3% is influenced by other variables.

CONCLUSIONS AND SUGGESTIONS

CONCLUSION

The result of this study is that the accounting information system has a positive and significant effect on the financial performance of MSMEs. The level of education has a positive and significant effect on the financial performance of MSMEs. The length of the business has a positive and significant effect on the financial performance of MSMEs. The provision of credit has a significant effect on the financial performance of MSMEs. The four variables simultaneously have a significant effect on the financial performance of MSMEs.

SUGGESTION

1. For MSME Actors:

MSME actors are expected to increase the implementation of Accounting Information Systems, strengthen basic accounting competencies through education or training, utilize business experience for performance stability, and manage credit in a planned manner for productive investments.

2. For Financial Institutions (Banks and Non-Banks):

Financial institutions need to provide more flexible credit products, assist MSMEs in financial management, and utilize digital data as an alternative to credit eligibility assessment.

3. For the Regional Government of Nganjuk Regency:

For local governments, it is important to provide integrated training, facilitate access to credit with subsidies or guarantees, open business consulting services, and support the promotion and local ecosystem of MSME cafes.

4. For Academics and Other Researchers:

Academics and researchers are advised to research other variables such as product innovation or local economic conditions, using a qualitative approach, and making comparisons between MSME sectors.

5. For PGRI MPU Sindok Nganjuk University:

Universitas PGRI MPU Sindok Nganjuk can play a role by integrating SIA materials and financial literacy in the curriculum, providing direct assistance to MSME cafes, and strengthening cooperation with the government and financial institutions.

BIBLIOGRAPHY

- Agnes Aura Ainisha, & Meidawati, N. (2022). *The Influence of Accounting Information Systems and Internal Control on Employee Performance*. *Journal of Business Applications*, 19(1), 189–200. <https://doi.org/10.20885/jabis.vol19.iss1.art6>
- Accounting, P., Education, T., Systems, D. A. N., & Accounting, I. (2024). 20-28+Knowledge+Accounting,+Level+Education,+And+System+Information+Accounting+Against+Performance+Business+Small+Medium. 3(2), 20–28.
- Amalia, M. M. (2023). *The Influence of Accounting Information Systems, Financial Report Quality, and Decision Making Effectiveness on MSME Performance in Jakarta*. *Western Science Journal of Accounting and Finance*, 2(02), 32–42. <https://doi.org/10.58812/jakws.v2i02.362>
- Ardiani, P., Regita, M., Hariyanti, S., & Muyassaroh, I. (2024). A . INTRODUCTION One of the economic drivers in Indonesia today is MSMEs (Micro, Small and Medium Enterprises). MSMEs are a business or business that can be run by individuals, households, or small entities. The existence of MSMEs is able to grow. IV(1), 31–54.
- Ate, V. W., Ratnawati, R., & Rokhman, M. T. N. (2022). *The Effect of Credit, Accounting Information System and Human Resource Competency on MSME*

- Performance. Management & Business Journal*, 8(1), 45–56.
<https://doi.org/10.37303/embeji.v8i1.150>
- Aullah, N., Nandiroh, U., & Sudaryanti, D. (2022). Education level, accounting understanding, business scale, and length of business on the quality of MSME financial statements. *Journal of Management and Professionals*, 3(2), 220–231. <https://doi.org/10.32815/jpro.v3i2.1492>
- Ayem, S., & Wahidah, U. (2021). Factors that affect the financial performance of MSMEs in the city of Yogyakarta. *JEMMA (Journal of Economics, Management and Accounting)*, 4(1), 1. <https://doi.org/10.35914/jemma.v4i1.437>
- Dan, P., & Against, P. (n.d.). The influence of population, education level and GDRB on poverty in Malang city. 104–117. Erawati, T., & Setyaningrum, L. (2021). The Influence of Business Length and Accounting Understanding on the Quality of MSME Financial Statements (Case Study on MSMEs in Jetis Bantul District). *Scientific Journal of Unified Accounting (JIAKES)*, 9(1), 53–60.
- Ernitawati, Y., & Yani, N. (2025). The Influence of Capital, Business Length and Credit on Financial Performance in Micro, Small and Medium Enterprises (MSMEs) in Oil Palm Hamlet, Padasugih Brebes Village (Case Study of Toko Zonaku Mongo). 3(1), 1–11.
- Hermawan, N. A., Mulyadi, D., & Sandi, S. P. H. (2024). The Influence of Own Capital, Loan Capital, and Business Length on MSME Income in East Karawang District. *Journal of Economics, Business and Accounting (COSTING)*, 7(2), 2975–2982. <https://doi.org/10.31539/costing.v7i2.7475>
- Holisoh, S., & Putra, R. R. (2022). Determinants of MSME Performance in Lagoa Village: Environmental Uncertainty as a Moderating Variable. *Journal of Business Accounting*, 20(1), 105–123. <https://doi.org/10.24167/jab.v20i1.4398>
- Kaka, M., Ejasari Harkadji, Faculty of Economics and Business, D., & Economics and Business, F. (2023). The Influence of Credit, Human Resource Competence, and Internal Control System on Financial Performance. *Journal of Student Research & Scientific Assessment (JPPIM) |*, 4(2), 9.
- Performance, T., Through, U., & Accounting, P. (2023). The Influence of E-commerce and Credit on MSME Performance through Accounting Understanding in 99 MSME Actors in Makassar City.
- Notoamodjo, S. (2014). *HEALTH RESEARCH METHODOLOGY*. Rineka Cipta.
- Nurchayati, N., & Budiman, W. (2023). The Influence of Education Level, Accounting Knowledge, Business Length and Business Scale on the Application of

- Accounting Information in Micro, Small and Medium Enterprises in Semarang Regency. Journal of Tembusai Education, 7(2), 18669–18674.*
- Nurkafta, M. (2022). The Influence of Educational Background, Business Scale, and Accounting Knowledge on the Use of Accounting Information Systems in MSMEs. JAMMI-UMMI Journal of Accounting, III(1), 17–25. Province, P., & West, J. (2020). No Title. 7(1), 147–161.*
- Puspartini, V., & Sulindawati, N. L. G. E. (2024). The Effect of Accounting Understanding, Education Level, Business Scale and Business Length on the Quality of Financial Statements of MSMEs in Kubu District. JIMAT (Scientific Journal of Accounting Students) Undiksha, 15(01), 211–220. <https://doi.org/10.23887/jimat.v15i01.68904>*
- Wahyuni, T., Marsdenia, M., & Soenarto, I. (2018). Analysis of the Effect of the Application of Accounting Information Systems on MSME Performance Measurement in the Depok Area. Indonesian Vocational Journal, 4(2). <https://doi.org/10.7454/jvi.v4i2.97>*
- Widiasa, I. P. J. P., & Julianto, I. P. (2021). The Effect of the Implementation of Internal Control Systems and Accounting Information Systems Based on Artificial Intelligence on the Tendency of Fraudulent Financial Reporting (Empirical Study on Star-Rated Hotels in Bali). JIMAT (Scientific Journal of Accounting Students) Ganesha University of Education, 12(1), 889–901.*

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