Proceedings of Forum for University Scholars in Interdisciplinary Opportunities and Networking
Graduate School, Universitas Terbuka
https://conference.ut.ac.id/index.php/fusion

The Influence of Digital Readiness, Accounting Information System Quality, and Audit Literacy on the Effectiveness of Internal Audit in MSMEs in Banjarnegara

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Abstract
This study aims to examine the influence of digital readiness, the quality of accounting information systems, and audit literacy on the effectiveness of internal audit in Micro, Small, and Medium Enterprises (MSMEs) in Banjarnegara Regency, Central Java. Employing a quantitative approach with multiple linear regression analysis, data were collected from 111 valid responses to questionnaires distributed among digitally enabled and legally registered MSMEs. The results indicate that both digital readiness and the quality of accounting information systems have a significant positive effect on internal audit effectiveness, while audit literacy does not have a statistically significant impact. These findings support contingency theory, which posits that the effectiveness of a control system depends on the alignment between internal and external factors. The study highlights the importance of technological infrastructure and system integration in improving internal audit functions, especially in the MSME sector. Recommendations are made for policymakers and stakeholders to support digital adoption and system improvements to enhance financial accountability in MSMEs.

Keywords:
Digital readiness, Accounting information systems, Audit literacy, Internal audit effectiveness, MSMEs, Contingency theory

1. Introduction

Micro, Small, and Medium Enterprises play a fundamental role in sustaining economic development across emerging economies, including Indonesia. According to the Ministry of Cooperatives and MSMEs, this sector contributes to over 60% of the national Gross Domestic Product and absorbs more than 97% of the workforce. In the province of Central Java alone, MSMEs form the economic backbone of both rural and urban communities. Despite their economic importance, MSMEs often struggle with sustainability issues, particularly in the areas of financial management, internal control, and accountability. As the global business environment becomes increasingly digital, it is crucial for MSMEs to strengthen their internal systems, including accounting information systems and internal audit practices to ensure financial integrity and long-term growth.

The intersection of information systems and auditing represents a growing area of interest in both academic research and practical implementation. Effective Accounting Information Systems can enhance the accuracy, timeliness, and relevance of financial information, supporting better decision-making and regulatory compliance [1]. Meanwhile, internal auditing functions as a mechanism to monitor business operations, prevent fraud, and ensure adherence to internal policies. However, while large organizations typically have formal internal audit units and robust AIS frameworks, MSMEs are often left behind due to limited resources, lack of expertise, and low digital readiness [2].

Previous studies have largely examined AIS and internal audit practices in isolation or within large corporate contexts. For example, Romney and Steinbart (2018) emphasized that the quality of AIS, defined by system reliability, integration, and user-friendliness, significantly impacts financial reporting accuracy and operational efficiency. Alayli (2023) found that digital readiness and system integration are positively associated with the quality of financial information among medium enterprises. On the auditing side, Nugroho (2020) showed that internal audits can reduce financial fraud risks, but his study

focused on large scale manufacturing firms. Kuraesin & Suharman (2021) explored audit literacy and its influence on internal control, yet her research was conducted in a corporate audit setting, not MSMEs.

This body of literature reveals a clear gap: while the importance of AIS and internal auditing is well established, there is limited empirical research that integrates digital readiness, AIS quality, and audit literacy as combined predictors of internal audit effectiveness, specifically within the context of MSMEs that lack formal audit departments [5]. Furthermore, existing models often assume the presence of structured financial reporting and auditing functions, which are not commonly found in MSMEs. In reality, internal auditing in MSMEs is often informal, carried out directly by the business owner or a trusted employee, without the formal designation of an audit team or procedures [6].

This study addresses that gap by proposing an integrative model that examines how digital readiness, AIS quality, and audit literacy influence the effectiveness of internal audit practices in MSMEs in Central Java [7]. This model acknowledges the unique characteristics of MSMEs, particularly the informal and owner-driven nature of internal controls. The novelty of this research lies in its focus on internal audit effectiveness not as a formal structure, but as a functional outcome shaped by the digital and informational capacity of MSMEs and their knowledge of audit principles [8].

Therefore, the purpose of this research is to investigate the influence of digital readiness, accounting information system quality, and audit literacy on the effectiveness of internal audit within MSMEs in Central Java. This research is expected to contribute both theoretically by filling a gap in the literature and practically by offering insights into how MSMEs can enhance their financial oversight mechanisms even without formal audit structures [9].

Despite the growing importance of digital transformation and internal control in business, many Micro, Small, and Medium Enterprises in Central Java still face significant challenges in implementing effective internal audit practices. While large organizations typically rely on formal internal audit departments and comprehensive accounting information systems, MSMEs often rely on informal monitoring mechanisms performed by the owners or a small internal team. This lack of structure leaves them vulnerable to financial misstatements, inefficiencies, and fraud [10].

Existing studies have investigated the role of digital readiness, the quality of AIS, and audit literacy in improving financial management. However, these variables have typically been examined in isolation, and primarily within larger organizational contexts [11]. Furthermore, current literature has yet to adequately address how these three factors interact to influence internal audit effectiveness in MSMEs, where formal audit structures are often absent [12].

This situation creates a knowledge gap: there is insufficient empirical evidence to explain how digital readiness, AIS quality, and audit literacy simultaneously affect internal audit effectiveness in the unique environment of MSMEs. Understanding these relationships is crucial for developing practical strategies that can enhance financial oversight and accountability in smaller businesses, especially as they transition to more digital operations [13].

Based on this gap, the central problem of this research can be formulated as follows: How do digital readiness, the quality of accounting information systems, and audit literacy affect the effectiveness of internal audit in MSMEs in Central Java?. This main question can be further elaborated into the following sub-questions: (a) To what extent does digital readiness influence internal audit effectiveness in MSMEs? (b) How does the quality of accounting information systems impact internal audit effectiveness? And (c) What is the effect of audit literacy on internal audit effectiveness?

To strengthen the theoretical framework, this study applies contingency theory more explicitly by examining whether MSMEs possess the appropriate organizational capabilities to align with their technological infrastructure. In this context, digital readiness represents external technological pressure, AIS quality reflects internal system capability, and audit literacy reflects human resource capacity. Internal audit effectiveness emerges only when these components fit together. Therefore, any mismatch such as advanced systems but low audit knowledge, may reduce control effectiveness. This theoretical integration helps interpret the unexpected negative coefficient of AIS quality and clarifies how digital, technical, and cognitive factors interact in MSMEs.

Based on the background and the identified research problem, this study aims to analyze the influence of digital readiness, the quality of accounting information systems, and audit literacy on the effectiveness of internal audit within Micro, Small, and Medium Enterprises in Central Java. Each independent variable in this study is grounded in Contingency Theory. Contingency theory posits that

the effectiveness of a management or control system depends on the alignment between organizational characteristics and external environmental conditions. In other words, there is no single universal system that fits all organizations, success is contingent upon factors such as technological readiness, organizational structure, and human resource competence [13].

The variable digital readiness reflects the environmental and technological preparedness of MSMEs to adopt and apply digital tools in their business operations [14]. The quality of accounting information systems represents the internal capability of an organization to adapt, implement, and operate systems that meet its specific informational and operational needs. Audit literacy, on the other hand, is closely linked to the internal ability of personnel to understand and execute control functions effectively. Lastly, internal audit effectiveness is viewed as an outcome influenced by the degree of fit between internal capabilities and external conditions, aligning with the central premise of contingency theory.

Specifically, the objectives of this research are: (a) To examine the effect of digital readiness on the effectiveness of internal audit in MSMEs, (b) To determine the impact of accounting information system quality on internal audit effectiveness, (c) To analyze the influence of audit literacy on the effectiveness of internal audit in MSMEs. (d) To assess the combined effect of digital readiness, AIS quality, and audit literacy on internal audit effectiveness and (e) This research is expected to provide contributions in both theoretical and practical dimensions:

For theoretical contribution, this study fills a gap in the existing literature by integrating three key constructs, digital readiness, AIS quality, and audit literacy, into one comprehensive model to explain internal audit effectiveness in MSMEs. Previous studies have typically explored these variables in isolation or within larger enterprises. By focusing on MSMEs in Central Java, this study offers a novel framework that is more applicable to small business contexts, where audit practices are often informal.

For practical contribution, the findings of this study can guide MSME owners, managers, and stakeholders in improving their internal audit practices, even without formal audit departments. By understanding how digital tools, reliable information systems, and basic audit knowledge contribute to financial oversight, MSMEs can strengthen their internal controls, reduce financial risk, and enhance accountability.

Policy Contribution, The results of this study may also support policymakers and institutions, such as local government, cooperatives departments, and financial regulators in designing training programs and digital literacy initiatives that are better tailored to the needs of MSMEs. This includes promoting the adoption of simple, affordable accounting systems and audit education for small business owners.

2. Method

This study employs a quantitative, explanatory research approach aimed at identifying and analyzing the causal relationship between independent variables, digital readiness, quality of accounting information systems, and audit literacy, and the dependent variable, namely the effectiveness of internal audit in Micro, Small, and Medium Enterprises in Central Java, Indonesia [15].

The population of this study consists of MSMEs operating in various sectors within the province of Central Java, which have adopted digital financial recording systems. Since the total number of MSMEs is large and varied, the sampling technique used is purposive sampling, focusing on businesses that meet the following criteria: (a) have implemented digital or software based accounting systems, (b) conduct regular internal financial reviews or checks, and (c) involve business owners or financial managers who understand basic financial oversight functions.

The purposive sampling process was conducted in three stages. First, a list of digitally enabled and legally registered MSMEs was obtained from the Banjarnegara Department of Cooperatives. Second, MSMEs were screened based on the predefined criteria, including the use of digital accounting tools and performance of internal financial checks. Third, respondents were contacted through WhatsApp groups, MSME associations, and field visits. Only MSME owners or financial managers who met all criteria were invited to participate in the survey.

The sample size is determined based on the rule of thumb provided by (Hair et al., 2014), which recommends a minimum of 5 to 10 respondents per indicator in the questionnaire. Given a total of approximately 20 indicators across all variables, a minimum of 100 to 200 valid responses is targeted for analysis [16].

The primary data are collected through a structured questionnaire distributed both online (Google Forms) and offline to qualified respondents. All questionnaire items are measured using a 5-point Likert scale, where 1 indicates "Strongly Disagree" and 5 indicates "Strongly Agree".

The variables in this study include one dependent variable and three independent variables. The dependent variable, internal audit effectiveness, refers to the level of success in conducting internal financial control activities within the organization. The independent variables are: (a) Digital readiness, which reflects the MSMEs' preparedness in adopting and utilizing digital technologies in business processes [17]; (b) Accounting information system quality, which indicates the extent to which the system provides accurate, timely, and secure financial information; (c) Audit literacy, which describes the knowledge and understanding of internal audit practices among business owners or staff [18].

Before distributing the full questionnaire, a pilot test was conducted with 20 MSME respondents to assess item clarity, relevance, and reliability. Feedback from the pilot test resulted in minor revisions to wording and layout to ensure that all items were understandable for MSME owners with varying levels of accounting knowledge. The pilot test reliability values all exceeded the minimum threshold of 0.60, indicating that the instrument was suitable for full distribution.

To minimize common method bias (CMB), several procedural remedies were applied. Respondents were assured of anonymity to reduce evaluation apprehension, and items were arranged to avoid leading or suggestive patterns. Additionally, different scale anchors were used across constructs to reduce response consistency biases. After data collection, Harman's single factor test was conducted, showing that the first factor accounted for less than 50% of the variance, indicating that CMB was not a serious concern in this study.

Data analysis is conducted using Multiple Linear Regression Analysis, assisted by SPSS version 25.0. This method is suitable for evaluating the direct influence of multiple independent variables on a single dependent variable. Before performing regression analysis, the data are subjected to several preliminary tests, including [19]: (a) Normality test using the Kolmogorov-Smirnov method; (b) Multicollinearity test based on Variance Inflation Factor (VIF); (c) Heteroscedasticity test using the Glejser test; and (d) Linearity test to verify the linear relationship between variables [20].\

Finally, the regression model is tested through F-test and t-test, where the F-test examines the simultaneous influence of all independent variables, and the t-test assesses the partial influence of each independent variable on the dependent variable. The level of significance is set at $\alpha = 0.05$, indicating that results with p-values less than 0.05 are considered statistically significant.

This methodological approach is expected to provide empirical evidence on the determinants of internal audit effectiveness in MSMEs and offer practical insights for improving internal financial governance in small-scale enterprises.

Based on the theoretical framework and previous empirical studies, this research formulates the following hypotheses to be tested:

H1: Digital readiness has a significant positive effect on internal audit effectiveness in MSMEs in Central Java.

H2: The quality of accounting information systems has a significant positive effect on internal audit effectiveness in MSMEs in Central Java.

H3: Audit literacy has a significant positive effect on internal audit effectiveness in MSMEs in Central Java.

H4: Digital readiness, accounting information system quality, and audit literacy simultaneously have a significant effect on internal audit effectiveness in MSMEs in Central Java.

3. Results and Discussion

3.1 Results

This study employs an associative approach, which aims to examine the relationship or influence between one variable and another. The researcher analyzed data collected through a questionnaire consisting of four statement items for the variable digital readiness (X1), four items for the quality of the accounting information system (X2), four items for audit literacy (X3), and five items for the effectiveness of internal audit in MSMEs (Y). The questionnaire was distributed to medium sized MSMEs located in Banjarnegara Regency, Central Java.

The returned questionnaires were first reviewed for completeness, and any that were not fully completed were excluded from the analysis. Out of a total of 150 questionnaires distributed, 125 were

returned, of which 14 were incomplete. Thus, the final number of valid and analyzable questionnaires was 111.

The MSMEs participating in this study are categorized into three groups: (a) Digitally enabled MSMEs Small to medium scale enterprises that have adopted software based accounting systems (rather than manual methods) and apply standard operating procedures for routine financial reporting or bookkeeping. (b) Legally registered MSMEs Enterprises that have formal legal status, are registered with the Department of Cooperatives and MSMEs, and possess a Business Identification Number. These businesses typically report an annual turnover exceeding IDR 500,000,000. (c) MSMEs with accounting training or mentorship experience Businesses that have participated in financial or accounting training programs and are often involved in government or state-owned business incubator programs. Although they may not have formal internal audit units, they tend to demonstrate a higher level of awareness regarding the importance of internal audit practices [21].

The following section presents respondent data categorized by business type within Banjarnegara Regency.

Tabel 1. Type Of Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fashion	22	19.8	19.8	19.8
	Automotive	3	2.7	2.7	22.5
	Culinary	76	68.5	68.5	91.0
	Education	7	6.3	6.3	97.3
	Services	1	.9	.9	98.2
	Other	2	1.8	1.8	100.0
	Total	111	100.0	100.0	

Source: Processed data (2025)

The following are the descriptive analysis results of the independent and dependent variables examined in this study.

Tabel 2. Descriptive Analysis

Descriptive Statistics						
	N	**Minimum**	**Maximum**	**Mean**	**Std. Error**	**Std. Deviation**
Internal Audit Effectiveness	111	5	25	21.70	.325	3.426
Digital Readiness	111	9	20	17.65	.254	2.679
Quality of SIA	111	9	20	18.25	.215	2.266
Audit Literacy	111	10	20	17.42	.227	2.388
Valid N (listwise)	111					

Source: Processed data (2025)

The analysis results show that the variable internal audit effectiveness has a minimum value of 5 and a maximum value of 25, with a mean of 21.70 and a standard deviation of 3.426. This indicates that, in general, respondents provided a high assessment of internal audit effectiveness within MSMEs, reflecting expectations for effective internal audit implementation and the accuracy of financial reporting.

The digital readiness variable has a minimum value of 9 and a maximum value of 20, with a mean of 17.65 and a standard deviation of 2.679. The high mean score suggests that digital readiness among respondents involves not only the availability of hardware but also the presence of competent software systems to support the financial performance of MSMEs.

The quality of the accounting information system variable has a minimum value of 9 and a maximum value of 20, with a mean of 18.25 and a standard deviation of 2.266. This result indicates that the quality of accounting information systems forms the foundation for reviewing internal financial reports, as each MSME manages different types of accounts, although still within the boundaries of the applicable financial accounting standards (SAK EMKM). The audit literacy variable shows a minimum value of 10 and a maximum value of 20, with a mean of 17.42 and a standard deviation of 2.388. The

high average suggests that audit literacy is considered important, as respondents understand the role of auditing in sustaining the operations of MSMEs and emphasize its importance in ensuring audit effectiveness.

Validity testing confirmed that all questionnaire items were valid for the independent variables, digital readiness, quality of the accounting information system, and audit literacy, as well as for the dependent variable, internal audit effectiveness in MSMEs [1].

Reliability testing is used to evaluate whether a questionnaire consistently measures the indicators of a variable or construct. A questionnaire is considered reliable if respondents' answers remain consistent and stable over time. According to [20]a questionnaire item is considered reliable if the Cronbach's Alpha value is greater than 0.60, and unreliable if it is less than 0.60.

The results of the reliability test indicate that all constructs digital readiness (X1), quality of the accounting information system (X2), audit literacy (X3), and internal audit effectiveness (Y) have Cronbach's Alpha values greater than 0.60, confirming that all instruments are reliable.

Following the validity and reliability tests, the next step was to conduct classical assumption testing. Prior to this, outlier detection was performed using casewise diagnostics to ensure that no extreme values existed that could distort the regression analysis results.

According to [20], the normality test aims to determine whether the data in the regression model, both dependent and independent variables are normally distributed or approximately normal, which is a key characteristic of a good regression model. One method used for this purpose is the Kolmogorov-Smirnov test, with the decision criterion as follows: the data are considered normally distributed if the significance value is ≥ 0.05, and not normally distributed if the significance value is ≤ 0.05.

Tabel 3. Normality Testing

One Sample Kolmogorov Smirnov Test

			Unstandardized Residual
N			109
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		1.66334295
Most Extreme Differences	Absolute		.087
	Positive		.063
	Negative		-.087
Test Statistic			.087
Asymp. Sig. (2-tailed)			.042[c]
Monte Carlo Sig. (2-tailed)	Sig.		.364[d]
	99% Confidence Interval	Lower Bound	.351
		Upper Bound	.376

Source: Processed data (2025)

Based on the normality test, the Monte Carlo significance (2-tailed) value was 0.364, indicating that the residuals in the regression model are normally distributed, as the Monte Carlo significance value is greater than 0.05.

The multicollinearity test is conducted by examining the tolerance and Variance Inflation Factor (VIF) values. These values are used to assess the extent to which an independent variable can be explained by other independent variables. The lower the tolerance value, the higher the corresponding VIF. According to commonly accepted thresholds, multicollinearity is considered absent when tolerance > 0.10 (10%) and VIF < 10. Conversely, if tolerance < 0.10 and VIF > 10, multicollinearity is present among the independent variables.

Tabel 4. Hasil Uji Multikolinieritas

Coefficients[a]			
Model		**Collinearity Statistics**	
		Tolerance	**VIF**
1	**Digital readiness**	.345	2.898
	SIA Quality	.354	2.824

Audit Literacy	.586	1.707

Sumber: Data Diolah (2025)

Based on the multicollinearity test results presented in the table above, it can be understood that all three independent variables digital readiness (X1), quality of the accounting information system (X2), and audit literacy (X3) have Variance Inflation Factor (VIF) values below 10, specifically: digital readiness with a VIF of 2.898, quality of the accounting information system with a VIF of 2.824, and audit literacy with a VIF of 2.981. Additionally, all variables have tolerance values greater than 0.10, with digital readiness at 0.345, quality of the accounting information system at 0.354, and audit literacy at 0.335. These results indicate that multicollinearity is not present among the independent variables in this study.

According to Ghozali (2018), the purpose of this test is to assess whether the residual variance is constant (homoscedasticity) or not (heteroscedasticity). A good regression model should fulfill the assumption of homoscedasticity. If heteroscedasticity is detected, one way to address the issue is by transforming the dependent variable into its natural logarithm. In the Park test, a significance value greater than 0.05 indicates the absence of heteroscedasticity, whereas a significance value less than 0.05 suggests the presence of heteroscedasticity.

Tabel 5. Heteroscedasticity Testing

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	**(Constant)**	1.611	1.877		.858	.393
	Digital Readiness	.134	.157	.139	.852	.396
	Quality of SIA	-.110	.171	-.107	-.643	.521
	Audit Literacy	-.011	.099	-.014	-.109	.913

Source: Processed data (2025)

Based on the table above, the results of the heteroscedasticity test show that the digital readiness variable has a significance value of 0.351 > 0.05, the quality of the accounting information system variable has a significance value of 0.396 > 0.05, and the audit literacy variable has a significance value of 0.521 > 0.05. These results indicate that all variables have significance values greater than 0.05, which means that no symptoms of heteroscedasticity are present in the regression model.

The regression analysis is conducted to determine the extent to which the independent variables digital readiness, quality of the accounting information system, and audit literacy influence the dependent variable, namely the effectiveness of internal audit. The following are the results of the multiple linear regression analysis:

Tabel 6. Regression Multiple Testing

Coefficients[a]								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	**(Constant)**	5.230	1.313		3.982	.000		
	Digital Readiness	.309	.101	.278	3.063	.003	.345	2.898
	Quality of SIA	1.224	.120	.942	10.220	.000	.335	2.981
	Audit Literacy	-.125	.069	-.126	-1.807	.074	.586	1.707

Source: Processed data (2025)

Based on the table above, the multiple linear regression analysis is calculated using the following equation:

$$Y = 5{,}230 + 0{,}309X_1 + 1{,}224X_3 - 0{,}125X_4 + 1{,}313$$

The constant (α) in the regression model is 5.230, which means that if the independent variables digital readiness (X1), quality of the accounting information system (X2), and audit literacy (X3) are equal to zero, the predicted value of internal audit effectiveness is 5.230.

The digital readiness variable (X1) has a regression coefficient of 0.309, indicating a positive relationship with internal audit effectiveness. This means that for every 1-unit increase in digital readiness, internal audit effectiveness increases by 0.309 units, assuming all other independent variables are held constant.

The quality of the accounting information system variable (X2) has a regression coefficient of –0.110 in the heteroscedasticity test and –1.224 in the final regression model, indicating a negative relationship with internal audit effectiveness. This means that higher perceived AIS quality is associated with a decrease in internal audit effectiveness, suggesting potential misalignment between system sophistication and MSME capabilities.

The audit literacy variable (X3) has a regression coefficient of –0.125, also indicating a negative direction. This suggests that for every 1-unit increase in audit literacy, internal audit effectiveness decreases by 0.125 units, assuming the other variables remain constant.

The hypothesis testing results show that the t-value for digital readiness is 3.063 with a significance level of 0.003, which is less than 0.05. Therefore, H1 is accepted, indicating that digital readiness has a significant positive effect on internal audit effectiveness in MSMEs.

The t-value for the quality of the accounting information system is –4.097, with a significance level of 0.000, which is also less than 0.05. Thus, H2 is accepted, confirming that AIS quality has a significant negative effect on internal audit effectiveness in MSMEs.

The t-value for audit literacy is –1.807, with a significance level of 0.074, which is greater than 0.05. Therefore, H3 is rejected, indicating that audit literacy does not significantly affect internal audit effectiveness in MSMEs, despite showing a negative coefficient.

The F-test, used to examine the simultaneous influence of independent variables on the dependent variable, determines whether the set of independent variables (X) jointly has a significant effect on the dependent variable (Y). This test is performed by comparing the probability (p-value) with the significance level (α = 0.05). The decision criteria are as follows:

Tabel 7. F Testing Result

ANOVA[a]						
	Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	716.878	4	179.219	693.973	.000[b]
	Residual	25.825	100	.258		
	Total	742.703	104			

Source: Processed data (2025)

Based on the results of the above test, it is shown that the calculated F-value df1 = k-1 is greater than the critical F-value and the significance level is less than 0.05. The Fvalue was obtained using degrees of freedom df1 = k - 1 = 3 and df2 = n - k = 105, resulting in an Fvalue of 2.69. Since the significance level is 0.000, which is less than 0.05, and the calculated F-value is 693.973, which is greater than 2.69, it can be concluded that Hypothesis 6 (H6) is accepted. This means that digital readiness, quality of the accounting information system, and audit literacy simultaneously have a significant effect on the effectiveness of internal audit in MSMEs.

The coefficient of determination test (R Square) is used to measure the extent to which the independent variables contribute to explaining the variance in the dependent variable within the regression model. The following are the results of the coefficient of determination test, as presented in the model summary table:

Tabel 8. R Square Testing

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.839[a]	.704	.692	1.695

a. Predictors: (Constant), digital readiness, quality of accounting information system, audit literacy
b. Dependent Variable: effectiveness of internal audit in MSME's

Source: Processed data (2025)

Based on the table above, the Adjusted R Square value is 0.692. This indicates that the dependent variable (effectiveness of internal audit in MSMEs) can be explained by the independent variables (digital readiness, quality of the accounting information system, and audit literacy) by 69.2%. The remaining 30.8% is explained by other variables that were not examined or included in the regression model.

3.2 Discussion

The dependent variable in this study is internal audit effectiveness, which is measured using several indicators: regular financial reviews, adherence to standardized procedures in financial reporting, the ability to detect errors and irregularities in transactions, the accuracy and timeliness of financial report preparation, and the presence of an audit trail feature for tracking financial history. This dependent variable is influenced by three independent variables, as examined through multiple linear regression analysis.[22]

The first independent variable, digital readiness, reflects the MSMEs' preparedness to adopt digital technologies that enhance internal audit effectiveness. The regression results indicate that digital readiness has a significant positive influence on internal audit effectiveness in MSMEs [15]. This finding is supported by the increasing availability of digital tools for financial recording, along with improved internet connectivity across most regions of Indonesia, which facilitates real-time and accurate financial data management [23], [24]. Furthermore, government or institutional support through training and mentoring can enhance MSME owners' ability to operate accounting applications and prepare financial reports that comply with applicable accounting standards [25]. Within the framework of Contingency Theory, digital readiness represents an environmental and technological factor that, when aligned with organizational characteristics, contributes to the sustained effectiveness of internal audits in MSMEs [18].

The second independent variable, accounting information system quality, shows a *significant but negative* effect on internal audit effectiveness. This result indicates that higher perceived AIS quality does not directly improve internal audit effectiveness among MSMEs [26]; instead, it may signal an overreliance on system-generated information without adequate manual review or internal control practices [27]. In MSMEs that lack formal auditing structures, a sophisticated AIS may inadvertently reduce owners' involvement in reviewing transactions, thereby lowering audit effectiveness [4]. This finding aligns with contingency theory: a control system becomes effective only when its complexity matches organizational capabilities. In MSMEs with limited audit expertise, higher AIS sophistication may create a misfit, resulting in lower internal audit effectiveness. This interpretation corrects earlier inconsistencies and integrates theoretical reasoning with empirical evidence [28].

The third independent variable, audit literacy, was found to have no significant effect on internal audit effectiveness [29]. Several contextual factors may explain this result. First, many MSME owners possess only basic financial knowledge and may not fully understand audit concepts such as audit trails, material misstatements, or risk assessment. As a result, their reported "audit literacy" may reflect general financial awareness rather than actual audit competence [30]. Second, the instrument used to measure audit literacy may have been interpreted differently by respondents, reducing its sensitivity in detecting variations in audit-related knowledge [2]. Third, because most MSMEs do not perform formal internal audits, knowledge of audit principles may not translate into practice, causing the variable to have limited behavioural relevance. These findings suggest that future research should refine audit literacy indicators, incorporate scenario-based assessments, or differentiate between conceptual and applied literacy [2].

4. Conclusion

This study investigated the influence of digital readiness, the quality of accounting information systems, and audit literacy on the effectiveness of internal audit within MSMEs in Banjarnegara, Central Java. Utilizing a quantitative approach with multiple linear regression analysis, the findings reveal that

both digital readiness and the quality of accounting information systems significantly impact internal audit effectiveness, whereas audit literacy does not show a significant influence.

Digital readiness, characterized by the availability of both hardware and software, enables MSMEs to carry out more accurate and timely financial reporting, aligning with the principles of contingency theory that emphasize the fit between internal capabilities and external demands. Similarly, a high-quality accounting information system facilitates real-time data access, system integration, and security, which are essential for effective internal control. However, audit literacy despite being acknowledged in theory as important has not translated into practical application in most MSMEs, likely due to limited formal audit structures and perceived cost burdens.

Overall, the study concludes that enhancing technological and informational infrastructure is vital to improving internal audit effectiveness in MSMEs. These findings suggest that policy initiatives and capacity-building programs should prioritize digital tools and AIS implementation to strengthen financial oversight in small and medium enterprises.

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