

# THE EFFECT OF ACCOUNTING KNOWLEDGE, BUSINESS EXPERIENCE, EDUCATION LEVEL, AND BUSINESS SCALE ON THE USE OF ACCOUNTING INFORMATION SYSTEMS BY MSMEs

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## Abstract

*This study investigates the determinants of Accounting Information Systems (AIS) utilization among 100 MSMEs in Gowa Regency by synthesizing Human Capital Theory and Contingency Theory. The research highlights how human capital (knowledge, experience, education) and organizational structural demands (business scale) drive digital financial transformation. Data were analyzed using multiple linear regression to examine both partial and simultaneous influences. The empirical findings confirm that accounting knowledge, business experience, formal education, and business scale significantly accelerate AIS adoption. Business experience emerges as the most influential factor, proving that accumulated tacit knowledge effectively lowers cognitive barriers to technology. Notably, formal education exerts a stronger impact than technical accounting literacy, indicating that broader cognitive capacity—or absorptive capability—is the true engine of sustainable digital integration. Furthermore, business scale acts as a structural catalyst, compelling MSMEs to formalize financial reporting as transaction complexity grows. This research demonstrates that financial digitalization is a strategic adaptation to dynamic organizational contexts rather than an optional trend. Strategically, these findings mandate a policy shift from abstract, theory-heavy accounting training toward segmented, practical digital literacy programs. Such interventions are vital for fostering a transparent, accountable, and digitally competitive MSME ecosystem in Gowa Regency.*

**Keywords :** *Accounting Knowledge, Business Experience, Education Level, Business Scale, AIS, MSMEs*

## INTRODUCTION

Advances in information technology have fundamentally changed the landscape of business management, including accounting. The implementation of an Accounting Information System (AIS) is now crucial for improving efficiency and effectiveness in strategic decision-making. Accounting Information System AIS is understood as the integration of protocols and technology that collects, processes, and presents financial data to assist management. Amidst intense global competition, implementing an AIS is a strategic step that businesses, including MSMEs, must take to adapt and thrive in the digital era (Doloksaribu et al., 2023; Syahputra et al., 2022). Globally, the digitalization of MSMEs is a key pillar in strengthening a country's economic stability. According to World Bank data 2023, accounting digitalization can optimize operational efficiency by 35% while reducing recording errors by up to 40%. The success of Singapore and South Korea is clear evidence that accounting information systems (AIS) are a driving force for MSME growth and a key foundation for business sustainability. However, the adoption of AIS in developing countries is still hampered by a lack of digital infrastructure, limited human resources, and a lack of technical knowledge (Alhempri et al., 2024).

Gowa Regency is a region in South Sulawesi with significant economic strength in the MSME sector. According to data from the Gowa Cooperatives and SMEs Office (2024), there are approximately 58,111 business units that drive the economy and contribute to the well-being of local residents. However, the majority of business owners still rely on manual record-keeping, resulting in low accuracy and timeliness of financial reports. Without the support of a robust Accounting Information System (AIS), managerial decision-making becomes unfounded, ultimately threatening the sustainability of these businesses (A. Putri & Putranti, 2024; Suintiah et al., 2024).

In addition to technical expertise, managerial experience and educational background are crucial determinants of accounting technology adoption in the MSME sector. Ghozali (2022), argues that hands-on experience hones practical skills and an individual's ability to overcome operational challenges. Found that

entrepreneurs with more than five years of operational experience have a more mature understanding of the urgency of AIS than beginners. Furthermore, (Amalia & Prasetyo, 2022) emphasized that formal education is positively correlated with analytical skills and openness to digital innovation. This finding is reinforced by Rahmawati & Yusuf (2023) who stated that adequate education facilitates systematic financial data management, thereby accelerating the effectiveness of AIS implementation (Anandya et al., 2023; Rina Andriany et al., 2023).

Operational scale is a crucial factor determining the optimal implementation of AIS. As business expands, Amalia & Prasetyo, (2022) explain, the need for information to support task complexity also increases. While medium- and large-scale entities require comprehensive systems for data-driven decision-making, micro-businesses are often hampered by limited human and financial resources. This underscores the urgency of examining how accounting knowledge, experience, education, and business scale collectively influence AIS adoption, particularly in Gowa Regency.

Previous research by (Hidayati et al., 2021) identified operational experience and accounting competency as key drivers of digital accounting system adoption. Meanwhile, Rahmawati & Yusuf (2023) positioned educational level as a mediating variable linking accounting knowledge to AIS utilization. However, these studies are geographically limited, with most studies conducted in urban areas with adequate technology access. This creates an information gap when applied to developing regions such as Gowa Regency, which has more heterogeneous digital literacy dynamics. Previous research has rarely addressed the regional contextual dimension of accounting technology adoption. Differences in social and economic structures, as well as disparities in digital literacy between urban and developing areas, such as Gowa Regency, have the potential to create unique patterns of understanding and application of AIS. Therefore, this research aims to provide a new contribution by simultaneously examining the influence of accounting expertise, business experience, education level, and business scale in Gowa Regency. Using a quantitative approach with multiple regression analysis, this study aims to objectively evaluate the relationships between these variables. The results of this study are expected to not only enrich the accounting literature on information system user behavior but also serve as a strategic reference for local governments in formulating policies to increase the digital capacity of MSMEs.

Historically, technology adoption in small businesses has often been viewed through user acceptance lenses. However, focusing solely on individual perception narrows the systemic reality of MSMEs. Therefore, this study departs from conventional acceptance models and approaches the phenomenon through a combination of Human Capital Theory and Contingency Theory. This dual-theoretical framework allows for a comprehensive assessment of how internal human capabilities (accounting knowledge, business experience, and education level) and structural organizational factors (business scale) contingency-wise drive the actual implementation of Accounting Information Systems (AIS).

## RESEARCH METHODS

This study uses a quantitative approach with an associative research design that aims to empirically test the causal relationship between independent and dependent variables. The primary focus of this study is to analyze the extent to which accounting knowledge, business experience, educational level, and business scale influence the use of Accounting Information Systems (AIS) among MSMEs in Gowa Regency. The data used are numerical and processed using statistical techniques to obtain objective and measurable conclusions regarding the phenomenon under study.

The population in this study consists of all registered Micro, Small, and Medium Enterprises (MSMEs) in Gowa Regency. To determine the minimum representative sample size from this large population, the Slovin Formula was utilized with a tolerable margin of error of 5% (or 10%, adjust to your data), yielding a specific sample size of responses.

Furthermore, this study employed a Purposive Sampling Technique (a non-probability sampling method based on specific, predefined objectives and criteria) rather than simple random sampling. This technique was selected to ensure that the sampled respondents possess the relevant characteristics necessary to answer the research problems. The specific criteria established for the sample selection include: (1) The MSME owner or financial manager serves as the primary respondent. (2) The business operates within the administrative area of Gowa Regency. (3) The MSME has been active for at least 1 (one) year. (4) The enterprise has implemented or initiated the use of basic accounting records or digital systems in its financial operations.

In this study, each variable is operationally defined and measured using instruments adapted from

previous research on a five-point Likert scale, ranging from one for "strongly disagree" to five for "strongly agree." The first independent variable is accounting knowledge, which is examined through the lens of Human Capital Theory as a form of specific human capital. It is defined as an individual's level of understanding regarding basic accounting principles, financial transaction recording, and the ability to prepare financial statements, with measurements adapted from Rahmawati & Yusuf (2023) using four questionnaire items. The second independent variable, business experience, represents experiential human capital and is defined as the accumulation of practical knowledge, strategic insights, and operational skills acquired by entrepreneurs over a certain period of business operation, which is measured through four items referencing the instrument by Destiana et al. (2024). Furthermore, the formal education level of the business owner serves as general human capital and is operationalized as the latest formal educational attainment completed by the owner or manager of the MSME, which shapes their logical mindset and digital literacy capabilities, measured using three items adapted from the studies of Aroginanto et al. (2023); Daniyati et al. (2024) The fourth independent variable is business scale, acting as a structural contingency factor within Contingency Theory, defined as the organizational operational capacity reflected through the number of active employees, monthly or annual revenue volume, and total asset growth, measured via three items adapted from Amalia & Prasetyo (2022) Lastly, the dependent variable in this study is the utilization of accounting information systems, defined as the actual intensity and consistency of MSME actors in implementing computerized or structured accounting information systems to support strategic decision-making, measured through four items referencing the work of (Astuti et al., 2024).

The data analysis process was conducted using SPSS software through several comprehensive statistical testing stages. The initial stage began with classical assumption tests, including normality, multicollinearity, and heteroscedasticity tests, to ensure that the regression model met the required criteria. Next, the data was analyzed using multiple linear regression to examine the partial (t-test) and simultaneous (F-test) effects of the independent variables on the dependent variable. Finally, a coefficient of determination ( $R^2$ ) analysis was conducted to determine the contribution of all independent variables in explaining variations in the use of Accounting Information Systems in MSMEs.

## RESULTS AND DISCUSSION

### RESULTS

**Table 1. Descriptive Analysis Results**

<b>Respondent Characteristics</b>	<b>Category</b>	<b>Number of (people)</b>	<b>Total</b>
Gender	Female	67	100
	male	33	
Age	< 25 - 30 Years	66	100
	31-4- Years	24	
	>40 Years	10	
Level of education	High School / Diploma	42	100
	Bachelor's / Master's / Doctoral	58	
Business Age	2-5 Years	32	100
	5-10 ears	61	
	>10 Years	7	

Source: Processed (2026)

This study involved 100 respondents from MSMEs in Gowa Regency, with a 100% return and processing rate for the questionnaires. Based on gender, the majority of respondents were female (67%) and 33 were male (33%). In terms of age, MSMEs were dominated by the young/productive age group (66%) (under 25–30 years),

followed by 24% (24%) of those aged 31–40, and 10% (10%) of those aged 40 and above.

Regarding educational background, the majority of respondents had higher education (Bachelor's/Master's/Doctoral) (58%), while 42% had a high school/diploma degree. Finally, based on the business age profile, the majority of the MSMEs studied have been operating for 5–10 years with a percentage reaching 61% (61 people), followed by businesses that have been running for 2–5 years at 32% (32 people), and established businesses over 10 years at 7% (7 people).

### Descriptive Statistical Analysis

Based on research data on 100 respondents, the following is a description of the characteristics of each variable.

**Table 2. Descriptive Analysis Results**

Variabel	Min	Max	Mean
Accounting Knowledge (X1)	31	55	43,68
Business Experience (X2)	17	30	24,29
Business Experience (X3)	9	20	15,85
Business Experience (X4)	12	20	16,16
Use of AIS (Y)	24	40	31,99

Source: SPSS (2026)

Overall, the descriptive statistics indicate that all study variables have a stable and consistent data distribution. This is evidenced by the standard deviation values, which tend to be smaller than the mean, indicating that the variation in answers between respondents does not experience extreme inequality. Therefore, this study's data has a relatively controlled level of distribution and can provide a representative picture of the characteristics of each tested variable.

### Reliability Test

**Table 3. Reliability Test**

Variable	Number of Questions	Cronbach Alpha	Criteria	Information
Accounting Knowledge (X1)	11	0,936	0,60	Reliabel
Business Experience (X2)	6	0,879	0,60	Reliabel
Business Experience (X3))	4	0,858	0,60	Reliabel
Business Experience (X4)	4	0,841	0,60	Reliabel
Use of AIS (Y)	8	0,958	0,60	Reliabel

Source: SPSS (2026)

All research instruments for variables X1, X2, X3, X4, and Y are declared reliable because they have a Cronbach's Alpha value greater than the standard requirement of 0.60. In detail, the reliability coefficient values are respectively 0.936 for accounting knowledge, 0.879 for business experience, 0.858 for educational level, 0.841 for business scale, and 0.958 for the use of accounting information systems.

### Normality Test

A normality test was conducted to ensure that the independent and dependent variables in the regression model were normally distributed. The method used in this study was the Kolmogorov–Smirnov test. Based on the testing criteria, data are considered to meet the assumption of normality if the resulting significance value (Asymp. Sig.) is greater than 0.05. Conversely, if the significance value is below this standard, the data distribution is considered abnormal. The results of the normality test using the Kolmogorov-Smirnov (K-S) method showed an

Asymp. Sig. (2-tailed) value of 0.200. Because this significance value far exceeds the minimum standard of 0.05, it can be concluded that the residual data in this regression model is normally distributed. These results prove that the normality assumption has been met, so the model is suitable for proceeding to the next stage of statistical testing.

**Table 4. Normality Test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	298.606.175
Most Extreme Differences	Absolute	.059
	Positive	.058
	Negative	-.059
Test Statistic		.059
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: SPSS (2026)

**Heteroscedasticity Test**

A heteroscedasticity test is performed to detect whether there is inequality in residual variance between observations in a regression model. The method applied in this study is the Glejser test, which is performed by regressing the absolute value of the residual against the independent variable. The model is declared free of heteroscedasticity if its significance value exceeds the threshold of 0.05 (5% confidence level), indicating that the residual variance is homogeneous or constant.

**Table 5. Heteroscedasticity Test**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.533	1.753		2.015	.047
	Accounting Knowledge (X1)	-.043	.036	-.154	-1.215	.227
	Business Experience (X2)	.002	.063	.004	.038	.970
	Educational level (X3)	-.021	.094	-.028	-.225	.822
	Business Scale (X4)	.056	.098	.073	.573	.568
a. Dependent Variable: ABS_RES						

Source: SPSS (2026)

Based on the results of the heteroscedasticity test, it is known that all variables have a significance value  $> 0.05$ , so it can be concluded that there are no symptoms of heteroscedasticity in the regression model used in this study.

### Multicollinearity Test

A multicollinearity test is performed to detect whether there is a correlation between independent variables in a regression model. An ideal model should not have a significant correlation between its independent variables. To prove this, this study uses the Tolerance and Variance Inflation Factor (VIF) parameters. Based on the testing criteria, a model is declared free from multicollinearity if it has a Tolerance value  $\geq 0.10$  and a VIF  $\leq 10$ . Conversely, if the Tolerance value is below 0.10 or the VIF exceeds 10, it indicates multicollinearity in the model.

**Table 6. Multicollinearity Test**

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Accounting Knowledge (X1)	.643	1.554
	Business Experience (X2)	.805	1.242
	Business Experience (X3)	.688	1.454
	Business Experience (X4)	.628	1.592

a. Dependent Variable: Use of AIS (Y)

Source: SPSS (2026)

Based on the data presented, all independent variables in this study showed tolerance values above 0.10 and VIF values below 10. These results confirm that there is no significant correlation between independent variables, so the regression model is declared free from multicollinearity symptoms and is suitable for further analysis.

### Multiple Linear Regression Analysis

**Table 7. Multiple Linear Regression Test**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.434	2.745		-2.344	.021
	Accounting Knowledge (X1)	.217	.056	.281	3.884	.000
	Business Experience (X2)	.506	.099	.332	5.134	.000
	Business Experience (X3)	.638	.147	.303	4.332	.000
	Business Experience (X4)	.405	.153	.194	2.644	.010

a. Dependent Variable: Use of AIS (Y)

Source: SPSS (2026)

Based on the results of the analysis in the multiple linear regression test table, the following regression equation model was obtained:

$$Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

So the resulting regression equation is:

$$Y = -6.434 + 0.217X_1 + 0.506X_2 + 0.638X_3 + 0.405X_4 + e$$

The regression equation in this study produces a constant value of -6.434, which mathematically represents the baseline value of the Accounting Information System Utilization variable (Y) when all independent variables are zero. Although negative, this constant does not affect the direction of the relationship between variables and functions more as a model parameter. The test results show that all independent variables, namely Accounting Knowledge (X1), Business Experience (X2), Education Level (X3), and Business Scale (X4), have positive regression coefficients and significance values below 0.05. This proves that these four factors have a positive and significant effect on the utilization of accounting information systems; meaning that increases in knowledge, experience, education level, and business scale will directly encourage increased use of accounting information systems in business operations.

### Partial Test

**Table 8. t-test (Partial Test)**

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.434	2.745		-2.344	.021
	Accounting Knowledge (X1)	.217	.056	.281	3.884	.000
	Business Experience (X2)	.506	.099	.332	5.134	.000
	Business Experience (X3)	.638	.147	.303	4.332	.000
	Business Experience (X4)	.405	.153	.194	2.644	.010

a. Dependent Variable: Use of AIS (Y)

Source: SPSS (2026)

The partial test (t) results in this study indicate that all independent variables have a significance value smaller than the threshold of 0.05. In detail, the variables Accounting Knowledge (X1), Business Experience (X2), and Education Level (X3) each have a significance value of 0.000, while the Business Scale variable (X4) has a significance value of 0.010. Based on these findings, all hypotheses proposed in this study are accepted, which means that Accounting Knowledge, Business Experience, Education Level, and Business Scale individually have been proven to have a positive and significant effect on the Use of Accounting Information Systems (Y).

### Simultaneous Test

Based on the results of the F test in the table above, the calculated F value is 50.373 with a significance level of 0.000 (less than 0.05). This indicates that variables X1, X2, X3, and X4 together have a significant influence on Y. Thus, the hypothesis stating that Accounting Knowledge, Business Experience, Education Level, and Business Scale have a simultaneous influence on the Use of Accounting Information Systems is declared accepted.

**Table 9. f-test (Simultaneous)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.872.250	4	468.063	50.373	.000 <sup>b</sup>
	Residual	882.740	95	9.292		
	Total	2.754.990	99			
a. Dependent Variable: Use of Accounting Information System (Y)						
b. Predictors: (Constant), Accounting Knowledge (X1), Business Experience (X2), Business Experience (X3), Business Experience (X4)						

Source: SPSS (2026)

### Coefficient of Determination Test ( $R^2$ )

The coefficient of determination ( $R^2$ ) measures the extent to which an independent variable explains variation in a dependent variable. This value ranges from 0 to 1.

**Table 10. Coefficient of Determination Test ( $R^2$ )**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824 <sup>a</sup>	.680	.666	3.048
a. Predictors: (Constant), (X4),(X3),(X2), (X1)				

Source: SPSS (2026)

Based on the table above, the coefficient of determination ( $R^2$ ) is 0.680, or 68.0%. This result indicates that 68.0% of variable Y can be explained by variable X, while the remaining 32.0% is influenced by other variables outside the research model.

## DISCUSSION

### The Influence of Accounting Knowledge on the Use of Accounting Information Systems

The results of the multiple linear regression analysis show that the accounting knowledge variable (X1) has a coefficient of 0.217, reflecting a positive relationship with the use of accounting information systems (Y). The t-test results further support this finding with a t-statistic of 3.884 and a significance value of 0.000, which is well below the 0.05 threshold. Statistically, this figure confirms that accounting knowledge is a highly significant determinant driving the adoption of technology-based financial information systems. Therefore, accounting knowledge is not merely an optional supplement, but a crucial instrument underlying strategic operational decisions by business owners.

From the framework of Human Capital Theory, accounting knowledge represents a specialized form of intellectual capital (specific human capital). This theoretical perspective argues that specific technical competencies directly enhance an individual's cognitive capacity, enabling them to process complex data with less cognitive burden. A deep understanding of the accounting cycle, from primary transaction recording to final

financial reporting (Hidayati et al., 2021), allows business owners to conceptualize the structural workflow of an Accounting Information System (AIS). Consequently, rather than focusing on abstract technological perceptions, this specialized human capital directly reduces psychological resistance and technological anxiety when migrating from manual logs to digital systems. In the specific local context of Gowa Regency, this finding reveals a critical socio-economic reality. Many MSME owners in Gowa operate intuitively based on market survival instincts rather than structured corporate training. When these entrepreneurs acquire accounting literacy—whether through prior formal studies or targeted vocational guidance—it alters their financial worldview. They stop viewing financial management as a tedious administrative burden and start recognizing it as a strategic necessity. This analytical maturity enables them to navigate user interfaces of modern accounting software much faster than those without any conceptual grounding. Interestingly, although accounting knowledge is highly significant, its standardized coefficient ( $\beta = 0.281$ ) is lower than that of general education and business experience. This indicates that while technical accounting literacy is necessary to understand the system's inputs, a broader intellectual maturity and operational experience are what truly compel a manager to utilize the system sustainably.

This positive relationship confirms that increasing technical accounting literacy directly drives the transformation of MSME financial management toward a more modernized, structured direction. These results reinforce the empirical evidence by Amalia & Prasetyo (2022); Rahmawati & Yusuf (2023), that human capital capability dictates the success of financial technology integration. Practically, the implication for regional development in Gowa Regency is that local institutions, such as the Gowa Regency Cooperative and MSME Department, must design training interventions that are highly practical. Instead of overloading small business owners with complex, manual double-entry bookkeeping theory, training should immediately bridge specific accounting concepts with intuitive, mobile-based digital AIS applications to foster a digitally resilient small business ecosystem.

### **The Influence of Business Experience on the Use of Accounting Information Systems**

The results of the multiple linear regression analysis show that the business experience variable ( $X_2$ ) yields an unstandardized coefficient of 0.506, indicating a positive relationship with the use of accounting information systems ( $Y$ ). This empirical finding is strongly supported by the t-test results, which present a t-statistic of 5.134 and a significance value of 0.000. Statistically, because the significance value is well below the 0.05 threshold, it confirms that business experience is a highly critical and statistically significant determinant in encouraging the actual adoption of financial information technology.

From the perspective of Human Capital Theory, business experience represents a vital stock of experiential human capital. This framework argues that human capital is not merely accumulated through formal classrooms, but is dynamically developed through long-term practical engagement, trial-and-error, and operational longevity. Consequently, instead of analyzing the phenomenon through abstract psychological perceptions of ease or usefulness as proposed by conventional technology acceptance models, this study proves that accumulated experiential capital directly expands an entrepreneur's tacit knowledge. Over years of managing a business, owners inevitably experience critical friction points—such as manual bookkeeping errors, untraceable cash outflows, or inaccurate pricing decisions during market shifts (Hidayati et al., 2021). These historical operational pain points serve as a powerful rational catalyst, increasing the entrepreneur's internal risk awareness and strategic foresight. In the specific socio-economic context of Gowa Regency, this analytical depth reveals why experience holds the most dominant influence in the regression model ( $\beta = 0.332$ ,  $t = 5.134$ ). A large portion of MSMEs in Gowa—ranging from local culinary businesses in Somba Opu to agricultural trade units in Malino—operate within culturally traditional and highly intuitive environments. For newer entrepreneurs, financial management is often treated as a compliance afterthought.

However, for seasoned business actors in Gowa, years of surviving market competition and navigating inflation or changing local consumer demands have taught them that structural chaos is the primary threat to

business sustainability. When these experienced owners transition to an Accounting Information System (AIS), they do not do so because of modern trend anxiety; rather, they do so as a deliberate, defensive choice to protect their business longevity. Long-term operational familiarity lowers their cognitive resistance to new systems, allowing them to systematically utilize accounting data to map expansion and control internal resources. This finding strongly corroborates the empirical evidence of Astuti et al. (2024; Destiana et al. (2024), which demonstrates that maturity in the industry accelerates the organic transition from archaic manual records to sophisticated digital systems.

The Gowa Regency Cooperative and MSME Department (*Dinas Koperasi dan UMKM*) should adjust their strategic approach. Instead of providing generalized, basic business training to all actors indiscriminately, they should deploy targeted mentoring programs. For highly experienced but digitally hesitant entrepreneurs, interventions should focus purely on demonstrating how user-friendly mobile AIS solutions can directly eliminate their daily operational leakages and secure their hard-earned business legacy.

### **The Influence of Education Level on the Use of Accounting Information Systems**

The results of the multiple linear regression analysis show that the formal education level variable (X3) has an unstandardized coefficient of 0.638, reflecting a positive relationship with the use of accounting information systems (Y). This empirical finding is strongly supported by the t-test results, which present a t-statistic of 4.332 and a significance value of 0.000, falling well below the 0.05 threshold. Statistically, this figure confirms that the formal educational background of an entrepreneur is a highly significant and positive determinant in accelerating the adoption of financial information technology within MSMEs.

From the perspective of Human Capital Theory, a business owner's formal education level represents general human capital. Unlike specific technical skills, general human capital focuses on the development of foundational cognitive capabilities, systematic mindsets, and abstract problem-solving tools (Afrinanda & Rina, 2025). Consequently, this study rejects conventional technology acceptance models that rely on user psychological perceptions, and instead emphasizes the internal development of an entrepreneur's absorptive capacity. A higher formal educational background fundamentally expands an individual's capacity to identify, assimilate, and utilize new digital infrastructures.

In the specific local context of Gowa Regency, this theoretical framework reveals a critical operational reality. Modern digital AIS tools—such as Android-based accounting applications or cloud-based point-of-sale systems—have become increasingly user-friendly, meaning that the primary barrier to adoption is no longer technical bookkeeping competence, but rather technological anxiety and a structural resistance to change. Well-educated business owners in Gowa possess a higher degree of digital literacy and analytical maturity. They are far more open-minded toward digital transformation and are capable of utilizing complex financial reports to make strategic, long-term business decisions, such as expanding market reach across the Mamminasata commercial corridor or restructuring operational costs. Conversely, limited formal education often hinders owners from fully maximizing the strategic benefits of accounting data, trapping them in basic, compliance-driven manual records. This empirical evidence strongly reinforces the findings of Daniyati et al. (2024) proving that general intellectual maturity is the prerequisite foundation that allows specific technological tools to be successfully integrated.

### **The Influence of Business Scale on the Use of Accounting Information Systems**

The regression analysis results show that the business scale variable (X4) has an unstandardized coefficient of 0.405, demonstrating a positive and significant effect on the use of accounting information systems (Y). This empirical finding is supported by the t-test results with a t-statistic of 2.644 and a significance value of 0.010, which is well below the 0.05 threshold. Statistically, this confirms that business scale is a vital structural determinant driving the adoption of financial information technology.

From the perspective of Contingency Theory, there is no universally optimal accounting system that fits

all enterprises; rather, the system's sophistication must dynamically align with the specific contextual factors of the organization. In this study, business scale represents a critical structural contingency factor measured by assets, employee count, and sales volume. Micro-enterprises with limited, localized transactions can easily survive using ad-hoc, manual records. However, as MSMEs in Gowa Regency expand into small or medium enterprises, manual bookkeeping becomes dysfunctional, leading to severe information asymmetry, data inaccuracies, and internal control failures (Afrianti & Halim, 2021; Daniyati et al., 2024).

In the specific local context of Gowa Regency, which is currently experiencing rapid commercial integration and urbanization along the Mamminasata economic corridor, this structural contingency becomes increasingly urgent. Growing MSMEs in Gowa face higher competitive market pressures and stricter supply chain compliance. Utilizing an AIS shifts from being an innovative option to a contingent structural necessity to secure operational efficiency and maintain data accuracy. Interestingly, although highly significant ( $p = 0.010$ ), the standardized coefficient of business scale ( $\beta = 0.194$ ) is lower than that of business experience ( $\beta = 0.332$ ) and formal education ( $\beta = 0.303$ ). This critical divergence indicates that while organizational size creates the structural urgency for a system, the final execution and consistency of AIS utilization are still heavily dictated by the internal human capital quality of the owner-manager. This finding aligns with the structural contingency framework of Otley (1980) and Kaukab et al. (2020), validating that business size growth demands a parallel evolution in digital accounting infrastructure to manage increasingly complex business challenges.

The F-test results show that accounting knowledge (X1), business experience (X2), education level (X3), and business scale (X4) simultaneously have a positive and significant influence on the use of Accounting Information Systems (AIS) among MSMEs in Gowa Regency. Partially, education level and business scale emerge as highly critical factors; higher education fundamentally improves general cognitive skills in navigating technology, while a larger business scale creates an immediate structural pressure for a formalized system to handle expanding operational complexity. By synthesizing Human Capital Theory and Contingency Theory, this multi-dimensional framework demonstrates that actual digital accounting adoption is determined by a holistic alignment between internal human capital stock (knowledge, experience, and education) and external organizational characteristics (business scale).

The synergy between these variables is the definitive key to successful technology adoption, as improvements in an isolated organizational aspect will not yield maximum results without the parallel support of individual capacities. This finding validates the theoretical assertion that individual capabilities and practical operational tenure are the core drivers of financial modernization. As an MSME becomes structurally established, its reliance on an AIS grows exponentially to maintain internal data accuracy and operational efficiency, thereby supporting rational, data-driven decision-making. Within this framework, while the growing scale of the business dictates the operational necessity for a system based on contingency principles, it is the developed human capital of the manager that ensures the system is successfully executed and maintained.

Strategically, the digital transformation of MSMEs in developing sub-urban regions requires a comprehensive, dual-pronged policy approach. The unique empirical contribution of this research demonstrates that in Gowa Regency, the organic interaction between internal human capacity and organizational context serves as the dominant driver for digital transformation, effectively driving regional modernization. Therefore, rather than deploying generalized technology rollouts, regional interventions must focus on improving accounting literacy and formal education in an integrated manner. Aligning individual competencies with the structural contingency requirements of growing enterprises is expected to successfully foster more transparent, accountable, and competitive financial management practices among MSMEs in the modern era.

## CONCLUSIONS

This study concludes that the utilization of Accounting Information Systems (AIS) among MSMEs in Gowa Regency is an integrated phenomenon driven by the harmonious alignment of internal human capacities

and external organizational structures. Rather than being determined by an isolated factor, systematic financial digitalization occurs when an enterprise's operational complexity matches the intellectual readiness of its managers. This research contributes to the accounting literature by establishing a robust integration between Human Capital Theory and Contingency Theory within the informal economic sector. It provides deep empirical evidence that human capital is multi-dimensional; while specific technical accounting literacy reduces computational anxiety, general human capital (formal education) and experiential stock (business tenure) are the primary catalysts that expand an entrepreneur's cognitive and absorptive capacity to embrace digital integration. Furthermore, through the lens of Contingency Theory, this study validates that organizational scale acts as a structural trigger—proving that as a business grows, formalizing information infrastructure shifts from an innovative luxury to a survival-driven necessity. These findings carry critical policy implications for regional socio-economic development. The digital transformation of small businesses cannot achieve maximum results through generalized, abstract technology rollouts. Therefore, the Gowa Regency Cooperative and MSME Department (Dinas Koperasi dan UMKM) must reshape its intervention paradigm by deploying segmented, highly practical mentoring programs. For established, large-scale MSMEs facing intense transaction complexity along the Mamminasata commercial corridor, local authorities should facilitate institutional credit packages that are directly bundled with user-friendly, mobile-based digital AIS solutions. Concurrently, for experienced but digitally hesitant traditional entrepreneurs, training must focus on demonstrating how immediate application-based records can eliminate daily operational leakages. By systematically bridging individual competencies with the structural contingency needs of growing enterprises, Gowa Regency can successfully build a highly resilient, transparent, and digitally competitive small business Ecosystem.

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