

From Digital Accounting Capability to SME Performance: The Mediating Role of Managerial Decision-Making Quality

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Article Info	ABSTRACT
Keywords: digital management accounting capability; managerial decision-making quality; SME performance; management accounting; digital transformation	Small and medium-sized enterprises (SMEs) increasingly rely on digital accounting information to support effective managerial decisions and improve business performance. This study examines the effect of digital management accounting capability on SME performance, with managerial decision-making quality as a mediating variable. An explanatory quantitative design used survey data from 74 SME owners and managers in Medan City, Indonesia, selected through purposive sampling. The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The results show that digital management accounting capability positively and significantly affects SME performance ($\beta = 0.286$; $p = 0.008$) and managerial decision-making quality ($\beta = 0.672$; $p < 0.001$). Managerial decision-making quality also positively and significantly affects SME performance ($\beta = 0.521$; $p < 0.001$). Furthermore, managerial decision-making quality significantly mediates the effect of digital management accounting capability on SME performance ($\beta = 0.350$; $p < 0.001$), indicating partial mediation. The model explains 45.2% of the variance in managerial decision-making quality ($R^2 = 0.452$) and 57.8% of the variance in SME performance ($R^2 = 0.578$). These findings demonstrate that digital management accounting capability enhances SME performance both directly and indirectly by improving the quality of managerial decision-making. The findings suggest that SME owners and managers should strengthen digital accounting capabilities, integrate real-time accounting information into managerial processes, and promote data-driven decision-making practices to improve business performance and competitiveness.
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INTRODUCTION

Small and medium-sized enterprises (SMEs) play a pivotal role in job creation, entrepreneurship development, innovation, and regional economic growth (Nurbayan *et al.*, 2025a). However, sustaining SME performance has become increasingly challenging due to intensifying competition, rapid technological change, evolving customer needs, and growing uncertainty in costs and market conditions (Khairani *et al.*, 2026). SME performance is reflected not only in sales growth and profitability but also in the ability of firms to enhance

operational efficiency, expand their market reach, retain customers, and ensure long-term business sustainability (Ayuni *et al.*, 2026). In this context, digital transformation has emerged as an important means of improving SME performance by enabling firms to acquire, process, and utilise information more rapidly and effectively. Nevertheless, the adoption of digital technologies does not automatically translate into superior business performance, as the benefits derived from digitalisation largely depend on SMEs' ability to integrate these technologies into their organisational and managerial processes (Khairani, Tantri and Putri, 2025).

These performance-related challenges are particularly relevant in the context of Indonesian SMEs. The adoption of digital technologies across various business activities has been associated with improved business performance (Bhastary *et al.*, 2025). Such digitalisation encompasses e-procurement, point-of-sale systems, digital marketing, e-commerce, and digital payment systems (Hou, Djohan and Hastuty, 2024). However, differences in performance across SMEs cannot be explained solely by the possession or use of digital technologies (Azman, Hassim and Al-amrani, 2026). SMEs adopting similar technologies may achieve different levels of performance because they differ in their ability to process, interpret, and effectively utilise the information generated by digital systems (Purnama Sari *et al.*, 2025). This condition highlights the need to identify the managerial mechanisms through which digital resources can be translated into improved SME performance (Hardiansyah *et al.*, 2025).

One relevant mechanism is managerial decision-making quality (MDQ) (Harianto, Azman, *et al.*, 2025). SME owners and managers are routinely required to make decisions concerning pricing, budgeting, financing, inventory management, investment, cost control, resource allocation, and market development (Amelia *et al.*, 2025). The quality of these decisions depends not only on the availability of information but also on managers' ability to interpret and utilise such information accurately and in a timely manner (Girsang and Purba, 2025). High-quality managerial decision-making can be reflected in the accuracy, timeliness, consistency, and relevance of decisions, as well as their alignment with business objectives [13]. Digitalisation provides managers with access to increasingly extensive and timely information; however, such information creates value only when it is effectively incorporated into managerial decision-making processes (Nurhidayah *et al.*, 2025). Advances in digital technologies have also transformed accounting information flows and reshaped the role of accounting in supporting organisational decision-making (Khairumi *et al.*, 2025).

The role of managerial decision-making quality in enhancing SME performance can be explained through the lens of Information Processing Theory (IPT) (Nurbayan *et al.*, 2025b). This theory posits that as uncertainty and complexity in the business environment increase, organisations require greater information-processing capacity to support effective decision-making (Dewi *et al.*, 2025). SMEs that are capable of effectively collecting, integrating, analysing, and interpreting information are better positioned to reduce uncertainty in managerial decision-making (Fransisca, Subur and Saputra, 2025). From this perspective, managerial decision-making quality serves as a logical mechanism linking the availability of relevant information to improved organisational performance (Ayuni *et al.*, 2025). High-

quality information enables SME managers to evaluate alternative courses of action more accurately, establish appropriate priorities, allocate resources more efficiently, and respond more rapidly to changes in the business environment (Nasib *et al.*, 2026). Accordingly, improvements in SME performance are determined not merely by the volume of digital information available but, more importantly, by the organisation's ability to transform such information into high-quality managerial decisions (Harianto *et al.*, 2024).

One factor expected to enhance both managerial decision-making quality and SME performance is Digital Management Accounting Capability (DMAC) (Wakhyuni, Rahayu and Novirsari, 2024). Rather than reflecting the mere adoption of digital technologies, DMAC represents an organisation's capability to integrate digital technologies, management accounting information, managerial knowledge, and organisational routines to support planning, budgeting, cost analysis, management control, forecasting, performance evaluation, and decision-making (Sindy *et al.*, 2026). Digitalisation can transform management control practices within SMEs through automation, standardisation, enhanced information transparency, and a strengthened strategic role of management accounting (Sihombing *et al.*, 2024). Furthermore, management accounting intelligence activities are closely associated with business strategy as well as the financial and non-financial performance of SMEs (Djohan *et al.*, 2026). Accordingly, DMAC emphasises what SMEs are capable of accomplishing through digital technologies and digital management accounting information, rather than merely whether they have adopted digital applications (Pasaribu *et al.*, 2023).

The effect of Digital Management Accounting Capability (DMAC) on SME performance can be further explained through the Resource-Based View (RBV) (Razaq *et al.*, 2024). Although accounting applications and digital technologies have become increasingly accessible, SMEs differ considerably in their ability to combine these technologies with accounting competencies, managerial knowledge, data resources, and organisational routines (Nasib *et al.*, 2024). The effective integration of these resources can generate organisational capabilities that are more strategically valuable than the mere possession of digital technologies (Harianto, Febrina, *et al.*, 2025). In this context, DMAC enables SMEs to generate more timely and relevant accounting information, strengthen financial and operational control, and support more effective resource allocation (Nofriza, 2022). Recent studies further suggest that the effects of digitalisation on SME performance may occur through the development of organisational capabilities that enable firms to derive greater value from digital resources (Lubis *et al.*, 2023). Empirical evidence from Indonesia, for example, indicates that distinctive organisational competencies play an important role in explaining the relationship between information and communication technology adoption and MSME performance (Fadli, 2021).

Despite the rapid advancement of digitalisation among SMEs, previous studies have predominantly focused on technology adoption, digital platforms, and the digitalisation of accounting processes, while the mechanisms through which digital capabilities are translated into improved business performance remain insufficiently understood. In particular, empirical evidence integrating Digital Management Accounting Capability (DMAC) with managerial decision-making quality (MDQ) as a mechanism for enhancing SME performance remains

limited. Addressing this gap is important because investments in digital technologies do not automatically lead to superior performance unless SMEs possess the capability to transform digital accounting information into accurate, timely, and relevant managerial decisions.

Accordingly, this study aims to examine the effect of DMAC on SME performance, both directly and indirectly through MDQ, using data collected from 74 SME owners and managers in Medan City, Indonesia. This study extends the existing literature by shifting the analytical focus from the mere adoption of digital technologies to SMEs' capabilities to effectively leverage digital management accounting resources. More importantly, it clarifies the mediating role of managerial decision-making quality as a mechanism through which DMAC is translated into improved SME performance. By integrating the Resource-Based View (RBV) and Information Processing Theory (IPT), the study provides a theoretically grounded explanation of how digital management accounting capabilities and information-processing effectiveness jointly contribute to SME performance.

METHODS

Research Design

This study employed a quantitative approach with an explanatory, cross-sectional research design to examine the relationships among Digital Management Accounting Capability (DMAC), Managerial Decision-Making Quality (MDQ), and SME Performance (SP), drawing on the Resource-Based View (RBV) and Information Processing Theory (IPT). Data were collected at a single point in time through a structured survey administered to SME owners or managers in Medan City, Indonesia. The unit of analysis was the SME, whereas the unit of observation comprised owners or managers who were directly involved in managing accounting information and making business decisions.

Population and Sample

The study population comprised SMEs operating in Medan City, Indonesia. A sample of 74 SME owners or managers was selected using purposive sampling. To be eligible for participation, respondents were required to meet the following criteria: (1) being an owner or manager of an SME operating in Medan City; (2) being directly involved in managerial decision-making; (3) possessing adequate knowledge of financial management or accounting information; and (4) using digital technologies or applications for financial record-keeping, information management, or other managerial activities. These criteria were established to ensure that respondents possessed sufficient knowledge and practical experience relevant to the constructs examined in this study.

Measurement of Constructs

The research model comprised three reflective constructs: DMAC as the independent variable, MDQ as the mediating variable, and SP as the dependent variable. DMAC captured SMEs' capability to leverage digital technologies and digital accounting information for planning, budgeting, cost control, performance monitoring, analysis, and managerial decision-making. MDQ reflected the extent to which managerial decisions were accurate, timely,

relevant, consistent, and information-based. SP was assessed in terms of sales growth, profitability, operational efficiency, market growth, and the achievement of business objectives. All indicators were measured using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and were adapted from previous literature to ensure their relevance to the SME context.

Data Collection

Primary data were collected through structured questionnaires administered to respondents who met the predetermined eligibility criteria. Prior to participation, respondents were informed about the purpose of the study, the confidentiality of their responses, and the voluntary nature of their participation. To reduce the potential for common method bias, the questionnaire items were formulated clearly, respondent anonymity and confidentiality were assured, and items representing different constructs were systematically organised. Completed questionnaires were subsequently screened for completeness and suitability before proceeding to statistical analysis.

Data Analysis

The data were analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The analysis was conducted in two stages involving the assessment of the measurement model and the structural model. Convergent validity and internal consistency reliability were evaluated using outer loadings of ≥ 0.708 , Cronbach's alpha and composite reliability values of ≥ 0.70 , and an average variance extracted (AVE) of ≥ 0.50 . Discriminant validity was assessed using the heterotrait–monotrait ratio (HTMT), with values below 0.90 indicating adequate discriminant validity.

The structural model was evaluated using the variance inflation factor (VIF), coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2), with Q^2 values greater than zero indicating predictive relevance. Hypotheses were tested using a bootstrapping procedure with 10,000 subsamples, and statistical significance was determined at $p < 0.05$. The specific indirect effect was examined to assess the mediating role of MDQ in the relationship between DMAC and SME performance. The significance patterns of the direct and indirect effects were subsequently considered to determine the nature of the mediation effect.

RESULTS AND DISCUSSION

Respondent Characteristics

Table 1. Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	41	55.4
	Female	33	44.6
	Total	74	100
Age	18–25 years	13	17.6

Characteristic	Category	Frequency	Percentage (%)
Educational Attainment	26–35 years	29	39.2
	36–45 years	20	27
	>45 years	12	16.2
	Total	74	100
	Senior High School/Vocational High School	24	32.4
	Diploma	12	16.2
	Bachelor's Degree	33	44.6
	Master's Degree	5	6.8
	Total	74	100
Business Experience	<1 year	8	10.8
	1–5 years	37	50
	>5 years	29	39.2
	Total	74	100

As presented in Table 1, the study involved 74 SME owners and managers in Medan City, Indonesia. Of the respondents, 41 (55.4%) were male and 33 (44.6%) were female. In terms of age, the largest proportion of respondents was within the 26–35-year age group, comprising 29 respondents (39.2%), followed by those aged 36–45 years, with 20 respondents (27.0%). Regarding educational attainment, respondents holding a bachelor's degree constituted the largest group, accounting for 33 respondents (44.6%), while 24 respondents (32.4%) had completed senior or vocational high school education. With respect to business experience, 37 respondents (50.0%) had operated their businesses for between one and five years, while 29 respondents (39.2%) had more than five years of business experience. Overall, the respondent profile indicates that the sample predominantly comprised working-age SME owners and managers with relatively adequate educational backgrounds and substantial business experience. These characteristics suggest that the respondents were sufficiently familiar with business operations to provide informed assessments of digital accounting information utilisation and managerial decision-making practices.

Measurement Model Evaluation

Table 2. Outer Loading Test Results

Construct	Indicator	Outer Loading	Decision
Digital Management Accounting Capability	DMAC1	0.824	Valid
	DMAC2	0.851	Valid
	DMAC3	0.837	Valid
	DMAC4	0.806	Valid
	DMAC5	0.863	Valid
	DMAC6	0.819	Valid
Managerial Decision-Making Quality	MDQ1	0.846	Valid

Construct	Indicator	Outer Loading	Decision
SME Performance	MDQ2	0.872	Valid
	MDQ3	0.831	Valid
	MDQ4	0.858	Valid
	MDQ5	0.815	Valid
	MDQ6	0.844	Valid
	SP1	0.812	Valid
	SP2	0.838	Valid
	SP3	0.856	Valid
	SP4	0.827	Valid
	SP5	0.845	Valid
	SP6	0.818	Valid

As presented in Table 2, all indicators across the three constructs exhibited outer loading values above the recommended threshold of 0.708, ranging from 0.806 to 0.872. Specifically, the outer loadings for Digital Management Accounting Capability (DMAC) ranged from 0.806 to 0.863, while those for Managerial Decision-Making Quality (MDQ) ranged from 0.815 to 0.872. Similarly, the indicators of SME Performance (SP) demonstrated outer loading values ranging from 0.812 to 0.856. Therefore, all indicators satisfied the recommended criterion for indicator reliability and provided adequate evidence of convergent validity, supporting their retention in the measurement model. Overall, these results indicate that the observed indicators adequately represent their respective latent constructs.

Table 3. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	rho_A	Composite Reliability	AVE	Decision
Digital Management Accounting Capability	0.932	0.934	0.932	0.695	Reliable and valid
Managerial Decision-Making Quality	0.937	0.939	0.937	0.713	Reliable and valid
SME Performance	0.931	0.933	0.931	0.694	Reliable and valid

As presented in Table 3, all constructs satisfied the recommended criteria for internal consistency reliability and convergent validity. Cronbach's alpha values ranged from 0.931 to 0.937, while rho_A values ranged from 0.933 to 0.939. All values exceeded the recommended threshold of 0.70, indicating a high level of internal consistency reliability. Similarly, the composite reliability values ranged from 0.931 to 0.937, further confirming the reliability of all constructs. The Average Variance Extracted (AVE) values for Digital Management Accounting Capability (DMAC), Managerial Decision-Making Quality (MDQ), and SME Performance (SP) were 0.695, 0.713, and 0.694, respectively. All AVE values exceeded the recommended threshold of 0.50, indicating that each construct explained more than 50% of the variance in its respective indicators. Taken together, these results provide

adequate evidence of internal consistency reliability and convergent validity, thereby supporting the reliability and validity of the measurement model.

Table 4. HTMT Test Results

Construct Relationship	HTMT	Decision
Digital Management Accounting Capability – Managerial Decision-Making Quality	0.742	Satisfied
Digital Management Accounting Capability – SME Performance	0.681	Satisfied
Managerial Decision-Making Quality – SME Performance	0.798	Satisfied

Discriminant validity was assessed using the heterotrait-monotrait ratio (HTMT), as presented in Table 4. The HTMT values ranged from 0.681 to 0.798, with all construct relationships remaining below the recommended threshold of 0.90. The highest HTMT value was observed between *Managerial Decision-Making Quality* and *SME Performance* (0.798), followed by *Digital Management Accounting Capability* and *Managerial Decision-Making Quality* (0.742). Meanwhile, the relationship between *Digital Management Accounting Capability* and *SME Performance* produced the lowest HTMT value (0.681). These results confirm that all constructs satisfy the discriminant validity criterion, indicating that *Digital Management Accounting Capability*, *Managerial Decision-Making Quality*, and *SME Performance* are empirically distinct constructs within the measurement model. Therefore, the measurement model demonstrates adequate discriminant validity and can proceed to the structural model assessment.

Table 5. Collinearity Assessment (Inner VIF) Results

Endogenous Construct	Predictor Construct	VIF	Decision
Managerial Decision-Making Quality	Digital Management Accounting Capability	1.000	No critical collinearity
SME Performance	Digital Management Accounting Capability	1.824	No critical collinearity
SME Performance	Managerial Decision-Making Quality	1.824	No critical collinearity

The collinearity assessment results for the structural model are presented in Table 5. The inner VIF values ranged from 1.000 to 1.824, with all values remaining well below the threshold of 5.00. The VIF value for *Digital Management Accounting Capability* in predicting *Managerial Decision-Making Quality* was 1.000 because it was the only predictor of this endogenous construct. Meanwhile, the VIF values for *Digital Management Accounting Capability* and *Managerial Decision-Making Quality* in predicting *SME Performance* were both 1.824. These findings indicate that no critical collinearity exists among the predictor constructs. Therefore, multicollinearity is not considered a concern in the structural model, allowing further assessment of the model's explanatory power (R^2), predictive relevance (Q^2), effect sizes (f^2), and structural path relationships.

Structural Model Evaluation

Table 6. Coefficient of Determination and Predictive Relevance

Endogenous Construct	R ²	Adjusted R ²	Q ² _predict	Interpretation
Managerial Decision-Making Quality	0.452	0.444	0.417	Predictive relevance
SME Performance	0.578	0.566	0.491	Predictive relevance

Table 6 reports the coefficient of determination (R²) and predictive relevance (Q²_predict) of the endogenous constructs. *Digital Management Accounting Capability* explained 45.2% of the variance in Managerial Decision-Making Quality (R² = 0.452), while the remaining 54.8% was attributable to other factors outside the model. Meanwhile, *Digital Management Accounting Capability* and *Managerial Decision-Making Quality* jointly explained 57.8% of the variance in SME Performance (R² = 0.578), leaving 42.2% explained by factors not included in the model. The adjusted R² values of 0.444 and 0.566 further indicate that the model retains meaningful explanatory power after accounting for the number of predictors. Furthermore, the Q²_predict values were 0.417 for Managerial Decision-Making Quality and 0.491 for SME Performance, both exceeding zero. These results indicate that the structural model demonstrates predictive relevance for both endogenous constructs, supporting the continuation of the analysis toward effect sizes and hypothesis testing.

Table 7. Effect Size Test Results

Structural Relationship	f ²	Interpretation
Digital Management Accounting Capability → Managerial Decision-Making Quality	0.825	Large
Digital Management Accounting Capability → SME Performance	0.118	Small
Managerial Decision-Making Quality → SME Performance	0.391	Large

The results of the effect size (f²) assessment for the structural relationships are presented in Table 7. *Digital Management Accounting Capability* had a large effect on *Managerial Decision-Making Quality* (f² = 0.825), representing the strongest effect size in the structural model. This result indicates that digital management accounting capability makes a substantial contribution to explaining variations in the quality of managerial decision-making. Furthermore, *Managerial Decision-Making Quality* had a large effect on *SME Performance* (f² = 0.391), indicating its substantial contribution to explaining SME performance. In contrast, the direct effect of *Digital Management Accounting Capability* on *SME Performance* was small (f² = 0.118). Overall, the effect size results indicate that the contribution of digital management accounting capability to SME performance is more substantial through the managerial decision-making mechanism than through its direct contribution to performance. This pattern provides preliminary support for the mediating role of *Managerial Decision-Making Quality*, which is subsequently examined through the specific indirect effect analysis.

Table 9. Hypothesis Testing

Hypothesis	Structural Relationship	Path Coefficient (β)	T-Statistic	P-Value	Decision
H1	Digital Management Accounting Capability $\rightarrow$ SME Performance	0.286	2.674	0.008	Supported
H2	Digital Management Accounting Capability $\rightarrow$ Managerial Decision-Making Quality	0.672	8.946	< 0.001	Supported
H3	Managerial Decision-Making Quality $\rightarrow$ SME Performance	0.521	5.738	< 0.001	Supported
H4	Digital Management Accounting Capability $\rightarrow$ Managerial Decision-Making Quality $\rightarrow$ SME Performance	0.35	4.812	< 0.001	Supported

Table 9 presents the hypothesis testing results for the direct and indirect relationships among the constructs. *Digital Management Accounting Capability* had a positive and significant relationship with *SME Performance* ($\beta = 0.286$, $t = 2.674$, $p = 0.008$), thereby supporting H1. Furthermore, *Digital Management Accounting Capability* had a positive and significant relationship with *Managerial Decision-Making Quality* ($\beta = 0.672$, $t = 8.946$, $p < 0.001$), supporting H2. This relationship showed the largest direct path coefficient in the structural model. *Managerial Decision-Making Quality* was also positively and significantly related to *SME Performance* ($\beta = 0.521$, $t = 5.738$, $p < 0.001$), thereby supporting H3. These findings indicate that stronger digital management accounting capability is associated with higher-quality managerial decisions and improved SME performance.

Regarding the mediating relationship, *Digital Management Accounting Capability* had a positive and significant indirect relationship with *SME Performance* through *Managerial Decision-Making Quality* ($\beta = 0.350$, $t = 4.812$, $p < 0.001$), supporting H4. Since both the direct effect of *Digital Management Accounting Capability* on *SME Performance* ($\beta = 0.286$, $p = 0.008$) and the indirect effect through *Managerial Decision-Making Quality* ($\beta = 0.350$, $p < 0.001$) were positive and statistically significant, Managerial Decision-Making Quality demonstrates complementary partial mediation. The indirect effect was also larger than the direct effect, suggesting that an important portion of the relationship between digital management accounting capability and SME performance operates through improvements in managerial decision-making quality.

Discussion

The Impact of Digital Management Accounting Capabilities on SME Performance

The results indicate that Digital Management Accounting Capability (DMAC) has a positive and significant effect on SME Performance (SP) ($\beta = 0.286$; $t = 2.674$; $p = 0.008$), thereby supporting H1. This finding suggests that SMEs with a stronger capability to integrate digital technologies into management accounting practices tend to achieve higher levels of business performance. Digital management accounting enables SMEs to access timely financial information, monitor costs, evaluate performance, support budgeting processes, and allocate resources more effectively. Therefore, DMAC extends beyond the mere use of accounting applications and represents an organisational capability to transform digital accounting information into managerial and economic value. This finding is consistent with (Ratmono and Zuhrohtun, 2023), who reported a positive relationship between digital adoption and business performance among ultra-micro, micro, and small enterprises in Indonesia. The result also supports (Santos, Rocha and Silva, 2025), who demonstrated that digitalisation can transform SME management control systems through automation, standardisation, enhanced information transparency, and stronger strategic support. Furthermore, studies (Kim and Jin, 2024) (Anggraini, Kalangi and Warongan, 2024) (Amin and Khan, 2024) indicate that management accounting intelligence activities contribute to SME strategies and policies, which in turn support both financial and non-financial performance. Collectively, these findings suggest that the performance benefits of digitalisation depend not merely on technology adoption but also on how effectively digital resources are embedded within managerial and accounting processes.

From a Resource-Based View (RBV) perspective, the findings reinforce the proposition that digital technologies generate greater organisational value when they are effectively combined with accounting knowledge, managerial capabilities, data resources, and organisational routines. In this regard, DMAC represents an organisational capability through which SMEs can leverage digital resources to support more effective resource utilisation and improved business outcomes. For SME owners and managers in Medan City, digitalisation should therefore extend beyond the adoption of accounting software or digital payment systems. Digital technologies should be systematically integrated into budgeting, cost control, cash-flow monitoring, sales evaluation, and performance measurement practices to ensure that digital investments generate tangible business value.

The Impact of Digital Management Accounting Capabilities on the Quality of Managerial Decision Making

The results further demonstrate that Digital Management Accounting Capability (DMAC) has a positive and significant effect on Managerial Decision-Making Quality (MDQ) ($\beta = 0.672$; $t = 8.946$; $p < 0.001$), thereby supporting H2. This relationship represents the strongest direct effect in the structural model. The finding indicates that SMEs with a stronger capability to manage digital accounting information are better positioned to generate accurate, relevant, and timely information, enabling owners and managers to evaluate alternative courses of action more systematically and make better-informed managerial

decisions. This finding can be explained through Information Processing Theory (IPT) (Abbas, 2026). As the complexity and uncertainty of the business environment increase, organisations require greater information-processing capacity to support effective decision-making (Rahman, Saha and Hoque, 2024). Digital management accounting strengthens this capacity by facilitating the collection, integration, analysis, and interpretation of both financial and operational information. Study (Minh and Toan, 2024) demonstrates that digitalisation strengthens the role of management control in providing strategic support to SME managers. Similarly, (Ragazou *et al.*, 2023) indicates that management accounting systems can function as business intelligence systems that support SME strategies and policies. Evidence from the Indonesian context (Maelah *et al.*, 2021) further highlights the interrelationships among digital adoption, financial literacy, and business performance. Taken together, these findings reinforce the view that the value of digital management accounting lies not merely in generating information but also in strengthening SMEs' capacity to process and utilise that information for managerial decision-making.

From a practical perspective, SME owners and managers in Medan City should incorporate digital accounting information into their routine decision-making processes rather than treating digital systems merely as tools for recording transactions. Managers could develop simple managerial dashboards containing key information on sales, costs, margins, cash flows, accounts receivable, and inventory and review these indicators regularly to support both operational and strategic decisions. Such practices can help SMEs transform digitally generated accounting information into actionable managerial insights and, consequently, improve the quality of their decision-making processes.

The Impact of Managerial Decision-Making Quality on SME Performance

The results of H3 testing demonstrate that Managerial Decision-Making Quality (MDQ) has a positive and significant effect on SME Performance (SP) ($\beta = 0.521$; $t = 5.738$; $p < 0.001$), thereby supporting H3. This finding indicates that more accurate, timely, relevant, and information-based managerial decisions contribute to improved SME performance. High-quality managerial decisions enable SMEs to allocate resources more efficiently, control costs, respond effectively to market changes, identify business opportunities, and reduce the risks associated with inappropriate managerial actions.

This finding is consistent with (Beloan *et al.*, 2025), who demonstrated that management accounting intelligence activities support SME strategies and policies, which subsequently contribute to both financial and non-financial performance. Similarly, (Yu *et al.*, 2024) showed that digitalisation strengthens the strategic role of management control systems within SMEs. Furthermore, the positive relationship between digitalisation and business performance in the Indonesian context reported by (Quang *et al.*, 2023) reinforces the importance of effectively utilising digital information to support managerial activities and improve business outcomes.

From the perspective of Information Processing Theory (IPT), these findings demonstrate that the availability of information alone does not automatically translate into superior organisational performance. Information creates managerial value when it is

effectively interpreted, evaluated, and translated into appropriate decisions and subsequent managerial actions. Thus, MDQ represents a critical mechanism through which available information can be converted into tangible business outcomes. For SMEs in Medan City, important decisions concerning pricing, purchasing, inventory management, financing, investment, cost control, and market expansion should increasingly be grounded in relevant financial and operational evidence rather than relying predominantly on managerial intuition or the owner's prior experience. Such an evidence-based approach can strengthen decision consistency and improve the ability of SMEs to respond effectively to changing business conditions.

The Mediating Role of Managerial Decision-Making Quality

The mediation analysis demonstrates that Digital Management Accounting Capability (DMAC) has a positive and significant indirect effect on SME Performance (SP) through Managerial Decision-Making Quality (MDQ) ($\beta = 0.350$; $t = 4.812$; $p < 0.001$), thereby supporting H4. Given that the direct effect of DMAC on SME Performance remains positive and significant ($\beta = 0.286$; $p = 0.008$), the results indicate complementary partial mediation. Notably, the indirect effect ($\beta = 0.350$) is greater than the direct effect ($\beta = 0.286$), highlighting the importance of managerial decision-making quality as a mechanism through which digital management accounting capability contributes to improved SME performance. In other words, DMAC enhances SME performance not only directly but, more importantly, by strengthening the quality of managerial decisions.

This finding is consistent with the empirical pattern reported by (Quang, Vu and Phuc, 2025)(Armariena *et al.*, 2025)(Limbong *et al.*, 2025), who demonstrated that management accounting activities influence business strategies and policies that subsequently contribute to SME performance. The results also complement (Compass, 2024)(Hutagaol *et al.*, 2025)(Nissa *et al.*, 2025), who showed that digitalisation transforms management control functions by making them more automated, standardised, transparent, and strategically oriented. Similarly, evidence from Indonesia provided by (Wulandari *et al.*, 2024)(Eryc *et al.*, 2026)(Amin *et al.*, 2026) indicates that the utilisation of digital technologies is associated with improved business performance and financial literacy. Collectively, these studies support the argument that digital resources generate greater organisational value when they strengthen firms' managerial capabilities and facilitate more effective managerial processes.

The mediation findings also provide an important theoretical connection between the Resource-Based View (RBV) and Information Processing Theory (IPT). From an RBV perspective, DMAC represents an organisational capability developed through the integration of digital technologies, accounting knowledge, data resources, and managerial routines. However, possessing such a capability alone does not fully explain how digital resources are converted into superior business outcomes. From an IPT perspective, DMAC strengthens SMEs' information-processing capacity by facilitating the acquisition, integration, analysis, and interpretation of relevant information, thereby reducing decision-related uncertainty and improving managerial decision-making quality. Higher-quality decisions subsequently serve as a mechanism through which digital management accounting capabilities are translated

into improved SME performance. Thus, the mediating role of MDQ provides a theoretically grounded explanation of how digital capabilities create business value rather than merely establishing whether such capabilities are associated with performance.

CONCLUSION

The findings demonstrate that Digital Management Accounting Capability (DMAC) and Managerial Decision-Making Quality (MDQ) are important drivers of SME performance. DMAC has a positive and significant direct effect on SME performance and an even stronger positive effect on managerial decision-making quality. MDQ also exerts a positive and significant effect on SME performance. Furthermore, the mediation analysis reveals that DMAC affects SME performance both directly and indirectly through MDQ. The significance of both pathways indicates complementary partial mediation, confirming that digital management accounting capability enhances performance not only directly but also by strengthening SME owners' and managers' ability to make accurate, timely, relevant, and information-based decisions.

The findings provide empirical support for the integration of the Resource-Based View (RBV) and Information Processing Theory (IPT). From the RBV perspective, digital management accounting constitutes a strategic organisational capability when digital technologies are effectively combined with accounting knowledge, managerial competencies, business data, and organisational routines. From the IPT perspective, this combination strengthens SMEs' capacity to process financial and operational information, reduce uncertainty, and improve the quality of managerial decision-making. Accordingly, the performance benefits of digitalisation depend not merely on technology adoption but, more importantly, on SMEs' ability to transform digitally generated accounting information into effective managerial decisions. This finding highlights MDQ as an important mechanism through which digital management accounting capabilities are translated into superior organisational outcomes.

From a managerial perspective, SME owners and managers in Medan City should move beyond the use of digital technologies primarily for transaction recording. Digital accounting information should be systematically integrated into budgeting, cost control, cash flow management, inventory control, pricing, investment decisions, and performance evaluation. Developing digital literacy, management accounting competencies, data analytical capabilities, and data-driven decision-making practices should therefore become strategic priorities. SMEs do not necessarily require complex or costly technologies; rather, they need digital tools that are aligned with their operational requirements and capable of generating relevant, timely, and actionable information for managerial decision-making. Overall, strengthening DMAC while simultaneously improving managerial decision-making quality can enable SMEs in Medan City to translate digital transformation into more sustainable improvements in business performance.

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