THE EFFECTS OF DIGITAL ACCOUNTING, FINANCIAL LITERACY, AND HUMAN CAPITAL ON MSME FINANCIAL REPORTING QUALITY

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Abstract:
Purpose - This study examines the effects of Digital Accounting, Financial Literacy, and Human Capital on Financial Reporting Quality among MSMEs in Medan, Indonesia.
Methods - A quantitative explanatory design was applied using a cross-sectional survey of 100 MSME owners and managers selected through purposive sampling. Data were analyzed using SEM-PLS with SmartPLS 4. The measurement and structural models were evaluated through validity and reliability tests, VIF, R^2, Q^2, SRMR, effect sizes, and bootstrapping with 5,000 resamples.
Findings - Digital Accounting, Financial Literacy, and Human Capital each have a positive and significant effect on Financial Reporting Quality, with Human Capital showing the strongest effect.
Research Implications - Integrating digital accounting adoption, financial literacy development, and human capital strengthening can improve MSME financial reporting quality. These results can guide MSME owners, managers, and policymakers in designing training and technology programs to strengthen financial reporting practices.
Originality - This study offers an integrated perspective for improving reporting practices and supporting informed managerial decision-making in emerging-market MSMEs.

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) rank among the most vital contributors to Indonesia's economy, creating jobs, driving growth at the local level, and lifting community welfare. Their role goes beyond adding to gross domestic product, as MSMEs have repeatedly shown an ability to withstand periods of economic turbulence. Even so, lasting business expansion depends more and more on access to sound financial information that underpins strategic planning, day-to-day operational control, investment choices, and adherence to financial regulations. As a result, the quality of financial reporting has emerged as a decisive factor shaping organizational performance and the long-term survival of businesses (OECD, 2023).

Fast-moving developments in digital technology have reshaped the way business organizations handle accounting. Digital accounting platforms let firms record transactions automatically, tighten data accuracy, speed up the reporting cycle, and give real-time access to financial data. Relative to manual bookkeeping, this reduces clerical mistakes and opens up organizational transparency, which in turn supports better-informed managerial choices. A body of earlier research consistently links digital accounting adoption to gains in both organizational efficiency and reporting quality (Febriansyah & Kamisa, 2023; Ahsan et al., 2025), (Wiralestari et al., 2025; Pangaribuan et al., 2025).

Technology alone, however, does not guarantee that digital accounting will be adopted successfully. Many MSMEs struggle to make full use of digital accounting applications because owners and staff often lack sufficient accounting background and financial-management skill. Financial literacy thus becomes a key capability, allowing managers to make sense of financial data, read accounting reports correctly, judge business performance, and arrive at sound financial choices. Businesses with greater financial literacy tend to manage their finances more effectively and turn out more dependable financial reports (Lusardi & Mitchell, 2014; Rahmawati, 2025), (Astarina et al., 2026; Fadhilah, 2024), (Ye & Kulathunga, 2019).

Beyond technological capacity and financial knowledge, the caliber of an organization's people strongly shapes how well accounting information systems actually work. Human capital covers employees' knowledge base, technical skill, work experience, creativity, and capacity to solve problems—elements that together feed into organizational performance. Advanced accounting technology on its own cannot guarantee good reporting if staff are not competent enough to run digital systems and read financial information correctly. Investing in human capital therefore remains essential for building organizational capacity and lifting the quality of financial reporting (Barney, 1991; Jonck, 2023), (Winarsih et al., 2024; Winarsih & Istianah, 2024), (Michael & Widjaja, 2024).

While a considerable number of studies have looked at how digital accounting adoption, financial literacy, and human capital relate to organizational performance, notable gaps persist. For one, most prior empirical work has treated these determinants as separate factors, leaving a fragmented picture of how they act together on financial reporting quality. In addition, relatively few studies place financial reporting quality itself at the center of the analysis for MSMEs in emerging economies. Few studies, too, have brought technological, behavioral, and strategic-resource perspectives into a single conceptual model capable of showing their combined effect on reporting quality. Comprehensive evidence on these joint relationships therefore remains scarce (Febriansyah & Kamisa, 2023; Ahsan et al., 2025; Wiralestari et al., 2025; Pangaribuan et al., 2025; Rahmawati, 2025; Astarina et al., 2026; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024; Fadhilah, 2024).

To close these gaps, the present study builds an integrated model that draws on the Technology Acceptance Model (TAM), Behavioral Finance Theory, and the Resource-Based View (RBV) together. Combining these three lenses offers a fuller account of how technology adoption, financial capability, and organizational

resources jointly shape financial reporting quality. In doing so, the study adds to the accounting literature by moving past single-factor explanations and supplying empirical evidence drawn from MSMEs in Medan, Indonesia (Davis, 1989; Barney, 1991), (Lusardi & Mitchell, 2014).

More precisely, the study sets out to analyze how Digital Accounting, Financial Literacy, and Human Capital affect Financial Reporting Quality among MSMEs. The results are intended to add depth to the literature on accounting information systems and MSME financial management, while also offering practical guidance for policymakers, educational institutions, and business-development agencies working to strengthen financial reporting within Indonesia's MSME sector.

THEORETICAL REVIEW

Resource-Based View (RBV)

According to the Resource-Based View (RBV), lasting competitive advantage grows out of how well an organization deploys resources that are valuable, rare, hard to imitate, and without close substitutes. Rather than looking outward at market conditions, RBV points to internal organizational capabilities as the chief drivers of sustained performance. Knowledge held by people, technological capacity, organizational routines, and managerial skill are all treated as strategic resources that let firms outperform their peers (Barney, 1991).

For MSMEs specifically, digital accounting systems, financial literacy, and human capital function as intangible resources that meaningfully raise financial reporting quality. Digital accounting lifts operational efficiency through automated transaction handling and real-time data, while financial literacy sharpens managers' ability to make sense of accounting information. At the same time, skilled personnel make sure accounting technologies are put to use effectively and consistently. RBV therefore offers a fitting theoretical lens for understanding how these strategic resources work together to improve reporting quality (Barney, 1991; Febriansyah & Kamisa, 2023), (Ahsan et al., 2025; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) accounts for how individuals come to accept and use information technology through two core constructs — perceived usefulness and perceived ease of use. TAM holds that people are more inclined to take up a new technology when they see it as improving their job performance and as something that does not demand excessive effort to operate (Davis, 1989). Applied to accounting, digital tools let MSMEs automate bookkeeping, raise data accuracy, cut down on recording mistakes, and speed up financial reporting. Yet how well the system is implemented hinges not just on whether the technology exists, but on how users perceive its benefits and ease of use. MSMEs that show stronger acceptance of digital accounting technology are thus expected to generate financial reports that are more accurate, timelier, and more transparent. Bringing TAM into this study offers a theoretical basis for explaining how the adoption of digital accounting feeds into financial reporting quality.

Behavioral Finance Theory

Behavioral Finance Theory holds that financial decisions are shaped not solely by rational calculation but also by an individual's knowledge, cognitive skill,

experience, and behavioral tendencies. Decision-makers with stronger financial literacy tend to be better equipped to assess financial information, allocate organizational resources efficiently, and put together dependable financial reports (Lusardi & Mitchell, 2014). In the MSME setting, financial literacy covers the knowledge and skills needed to grasp accounting concepts, draw up financial statements, manage cash flow, weigh investment decisions, and comply with financial regulations. Owners with stronger financial literacy are better positioned to cut financial errors, sharpen budgeting accuracy, and lend more credibility to their financial reports (Lusardi & Mitchell, 2014; Rahmawati, 2025), (Astarina et al., 2026; Fadhilah, 2024), (Ye & Kulathunga, 2019). Behavioral Finance Theory therefore serves as an appropriate theoretical basis for explaining the significant role financial literacy plays in financial reporting quality (Lusardi & Mitchell, 2014).

Human Capital Theory

Human Capital Theory regards employees' knowledge, education, professional skills, experience, and competencies as valuable assets able to lift productivity and overall organizational performance. Spending on education, training, and professional development sharpens employees' capacity to solve organizational problems and to adjust to technological change (Barney, 1991; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024).

In settings built around digital accounting, capable personnel are essential to keeping accounting information systems running effectively. Staff with solid accounting knowledge and digital skills are better able to produce accurate financial statements, sustain internal control procedures, and make efficient use of accounting software. Organizations that invest in developing their human capital are consequently more likely to reach higher levels of financial reporting quality (Barney, 1991; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024).

Digital Accounting and Financial Reporting Quality

Digital accounting means using digital technologies and computerized accounting information systems to record, process, store, and communicate financial information. Set against traditional accounting practices, it raises operational efficiency by automating transaction processing, cutting down manual errors, strengthening data security, and enabling real-time financial reporting (Febriansyah & Kamisa, 2023; Ahsan et al., 2025; Wiralestari et al., 2025; Pangaribuan et al., 2025; Rahmawati, 2025; Astarina et al., 2026; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024; Fadhilah, 2024).

A consistent finding across earlier empirical studies is that adopting digital accounting meaningfully improves organizational transparency, the accuracy of reporting, operational efficiency, and the quality of managerial decisions. It also helps firms comply with accounting standards, since financial information ends up being processed in a systematic and consistent manner (Ahsan et al., 2025; Wiralestari et al., 2025; Pangaribuan et al., 2025; Rahmawati, 2025; Astarina et al., 2026). Drawing on the Technology Acceptance Model together with earlier empirical evidence, organizations that adopt digital accounting systems successfully are expected to turn out higher-quality financial reports (Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024).

H1: Digital Accounting exerts a positive and significant effect on Financial Reporting Quality.

Financial Literacy and Financial Reporting Quality

Financial literacy refers to an individual's ability to understand, analyze, interpret, and put financial information to effective use when making business decisions. Managers who are financially literate tend to be stronger at budgeting, financial planning, evaluating investments, managing debt, and financial reporting (Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024). MSME owners with stronger financial literacy usually have a more thorough grasp of accounting principles, which helps them draw up financial statements that are more accurate, transparent, and aligned with accounting standards. Financial literacy also supports better use of accounting technology and reinforces managerial accountability (Febriansyah & Kamisa, 2023; Ahsan et al., 2025; Wiralestari et al., 2025; Pangaribuan et al., 2025). Organizations with higher financial literacy are therefore expected to show superior financial reporting quality (Rahmawati, 2025; Fadhilah, 2024), (Ye & Kulathunga, 2019).

H2: Financial Literacy exerts a positive and significant effect on Financial Reporting Quality.

Human Capital and Financial Reporting Quality

Human capital brings together employees' knowledge, technical expertise, professional experience, creativity, and problem-solving skill. Skilled personnel count among an organization's most valuable assets, since they determine how effectively technology is implemented, how well the organization learns, and the quality of strategic decisions (Ahsan et al., 2025; Wiralestari et al., 2025; Pangaribuan et al., 2025; Rahmawati, 2025; Astarina et al., 2026; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024; Fadhilah, 2024; Ye & Kulathunga, 2019).

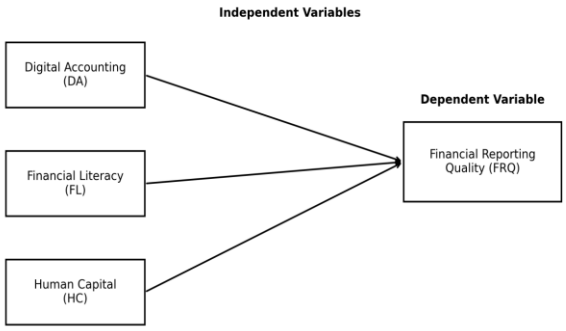
In accounting work specifically, employees with strong accounting competence can prepare accurate financial statements, apply accounting standards correctly, keep reporting errors to a minimum, and use digital accounting systems efficiently. Human capital also makes an organization more adaptable to technological innovation and shifting regulatory demands (Wiralestari et al., 2025; Pangaribuan et al., 2025; Rahmawati, 2025; Astarina et al., 2026; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024). Organizations that invest in building human capital are therefore expected to achieve better financial reporting quality (Rahmawati, 2025; Astarina et al., 2026; Jonck, 2023; Winarsih et al., 2024; Winarsih & Istianah, 2024; Michael & Widjaja, 2024; Fadhilah, 2024; Ye & Kulathunga, 2019).

H3: Human Capital exerts a positive and significant effect on Financial Reporting Quality.

Conceptual Framework

Drawing together the Resource-Based View (RBV), the Technology Acceptance Model (TAM), and Behavioral Finance Theory, this study puts forward a conceptual framework in which Digital Accounting, Financial Literacy, and Human Capital act as exogenous variables affecting Financial Reporting Quality, the endogenous variable. The framework rests on the assumption that technological capability, financial competence, and organizational resources reinforce one another in raising the accuracy, reliability, timeliness, and transparency of financial reporting within MSMEs (Davis, 1989; Barney, 1991), (Lusardi & Mitchell, 2014).

Figure 1. Conceptual Framework



Source: Developed by the author based on the proposed research model.

RESEARCH METHODS

Research Design

A quantitative, explanatory design was used in this study to examine the causal links among Digital Accounting, Financial Literacy, Human Capital, and Financial Reporting Quality within Micro, Small, and Medium Enterprises (MSMEs). The quantitative approach was chosen because it allows latent constructs to be measured objectively and the hypothesized relationships to be tested through statistical modeling. An explanatory design fits well with testing theory-driven relationships built on the Technology Acceptance Model (TAM), Behavioral Finance Theory, and the Resource-Based View (RBV) (Davis, 1989; Barney, 1991), (Lusardi & Mitchell, 2014). Data collection relied on a cross-sectional survey given to MSME owners and managers based in Medan, North Sumatra, Indonesia. This method suited the study well because it allows standardized responses to be gathered from many businesses within a fairly short timeframe.

Population and Sample

The population targeted by this study comprised actively operating MSMEs in Medan that had put basic accounting practices to use in running their business. Purposive sampling was used to select respondents, so that participants would have adequate knowledge of the financial-management and accounting activities carried out in their enterprises. To qualify for inclusion, respondents needed to meet the following criteria:

1. Serve as an owner or manager who holds responsibility for financial decision-making.
2. Have run the business for a minimum of two years.
3. Have kept financial records, whether manually or digitally.
4. Be familiar with accounting practices and the financial reporting process.

In total, 100 usable questionnaires were gathered and analyzed. The structural model contains three predictor constructs pointing to one endogenous construct; therefore, the commonly cited 10-times rule for PLS-SEM indicates a minimum of 30 observations. With 100 usable responses, the sample exceeds this heuristic minimum. The sample size is therefore considered adequate for the proposed predictive model, while the results remain specific to the study population and sampling design (Hair et al., 2022).

Data Collection Procedure

A structured questionnaire, handed directly to respondents, served as the source of primary data. Before the main survey was carried out, the instrument was checked for clarity, relevance, and alignment with the study's objectives. Respondents were told that taking part was voluntary and that their answers would stay confidential and be used only for academic purposes.

The instrument was divided into two parts. The first gathered demographic and business-related details about respondents, while the second measured the latent variables through several indicators adapted from prior literature.

Measurement of Variables

The study looked at one endogenous construct alongside three exogenous constructs. Every measurement item was adapted from earlier studies and adjusted to suit the MSME context in Indonesia. A five-point Likert scale, running from 1 (strongly disagree) to 5 (strongly agree), was used to record responses.

Table 1. Operational Definition of Variables

Variable	Operational Definition	Indicators
Digital Accounting (DA)	How far MSMEs make use of digital accounting systems to record, process, and report financial information in an efficient and accurate manner.	Ease of use, system usefulness, transaction automation, reporting efficiency, information accuracy
Financial Literacy (FL)	The knowledge and capacity of business owners or managers to understand and apply financial information when making decisions.	Financial knowledge, budgeting, cash-flow management, financial analysis, financial decision-making
Human Capital (HC)	The knowledge, competencies, professional experience, and skills held by employees or business owners that feed into organizational performance.	Accounting competence, education, professional experience, training, problem-solving ability
Financial Reporting Quality (FRQ)	The extent to which financial statements are accurate, reliable, relevant, timely, and understandable enough to support managerial decision-making.	Accuracy, reliability, relevance, timeliness, transparency

Source: Adapted from previous studies and modified by the author.

The table summarizes the operational definitions and indicators used to measure Digital Accounting, Financial Literacy, Human Capital, and Financial Reporting Quality.

Data Analysis Technique

SmartPLS Version 4 was used to run Structural Equation Modeling–Partial Least Squares (SEM-PLS) on the proposed model. SEM-PLS was chosen for being well suited to predictive research, complex causal modeling, and studies where latent variables are captured through several indicators. It also yields robust parameter

estimates without demanding multivariate normality and performs reliably even with relatively small samples (Hair et al., 2022). Analysis proceeded in two stages, evaluating the measurement model first and then the structural model.

Measurement Model Assessment

The measurement model was assessed to check the reliability and validity of each construct, using the following criteria:

1. Indicator reliability, assessed through outer loading values, with a recommended cut-off of 0.70 or above.
2. Internal consistency reliability, evaluated via Cronbach's Alpha and Composite Reliability (CR), with values exceeding 0.70 taken as satisfactory.
3. Convergent validity, examined through the Average Variance Extracted (AVE), with values above 0.50 deemed acceptable.
4. Discriminant validity, assessed using both the Fornell–Larcker Criterion and the Heterotrait–Monotrait Ratio (HTMT) (Henseler et al., 2015; Fornell & Larcker, 1981).

Structural Model Assessment

Once the measurement model proved adequate, the structural model was evaluated through the following procedures:

1. Checking for multicollinearity via the Variance Inflation Factor (VIF).
2. Estimating the coefficient of determination (R^2) to gauge the model's explanatory power.
3. Assessing predictive relevance (Q^2) through the blindfolding procedure.
4. Evaluating model fit using the Standardized Root Mean Square Residual (SRMR).

Testing the hypotheses via a bootstrapping procedure with 5,000 subsamples to estimate path coefficients, t-statistics, p-values, and confidence intervals. A hypothesis was treated as statistically supported whenever its p-value fell below 0.05 and its t-statistic exceeded 1.96 at the 95% confidence level.

Common Method Bias Assessment

Since all variables came from a single survey instrument, the possibility of common method bias (CMB) needed to be checked. Harman's Single-Factor Test was applied to see whether one latent factor could account for most of the total variance. The first factor explained a proportion of variance below the widely used 50% cutoff, suggesting that common method bias was not a major issue in this study (Kock, 2015).

RESULTS AND DISCUSSION

Respondents' Characteristics

The final analysis drew on 100 valid questionnaires. Respondents were MSME owners and managers directly engaged in financial management and accounting work. Their business experience and familiarity with accounting practice meant that the data gathered reasonably reflected the operational realities of MSMEs in Medan.

Respondents' demographic profile spans several business sectors, among them trade, manufacturing, and services. Most had been running their businesses for over three years, pointing to sufficient organizational experience with financial-management practices. Most had also used either manual or digital accounting systems to record transactions in the past, indicating that they had enough background to meaningfully judge the constructs examined in this study.

Table 2. Respondents' Demographic Characteristics

Characteristic	Frequency	Percentage (%)
Gender		
Male	42	42.0
Female	58	58.0
Age		
<30 years	21	21.0
31–40 years	35	35.0
41–50 years	29	29.0
>50 years	15	15.0

Source: Processed survey data (2026).

The table presents the demographic characteristics of the 100 respondents, including gender and age distribution.

Measurement Model Assessment

Before the structural relationships were tested, the measurement model was checked to confirm that every construct met the requirements for reliability and validity. This assessment covered indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

Indicator Reliability

Outer loading values were used to examine indicator reliability. Table 3 shows that every indicator's loading exceeded the recommended 0.70 threshold, meaning each one adequately reflected its underlying latent construct.

Table 3. Outer Loadings

Construct	Indicator	Outer Loading	Decision
Digital Accounting (DA)	DA1	0.781	Valid
	DA2	0.814	Valid
	DA3	0.856	Valid
	DA4	0.842	Valid
	DA5	0.803	Valid
Financial Literacy (FL)	FL1	0.768	Valid
	FL2	0.821	Valid
	FL3	0.847	Valid
	FL4	0.833	Valid
	FL5	0.801	Valid
Human Capital (HC)	HC1	0.792	Valid
	HC2	0.838	Valid
	HC3	0.861	Valid
	HC4	0.849	Valid

Construct	Indicator	Outer Loading	Decision
Financial Reporting Quality (FRQ)	HC5	0.817	Valid
	FRQ1	0.785	Valid
	FRQ2	0.824	Valid
	FRQ3	0.859	Valid
	FRQ4	0.846	Valid
	FRQ5	0.812	Valid

Source: SmartPLS 4 Output, Processed Data (2026).

All outer loading values exceed 0.70, indicating adequate indicator reliability for the four latent constructs.

These results confirm that all measurement indicators are sufficiently reliable and make a meaningful contribution to measuring Digital Accounting, Financial Literacy, Human Capital, and Financial Reporting Quality.

Internal Consistency Reliability and Convergent Validity

Cronbach's Alpha and Composite Reliability (CR) were used to assess internal consistency reliability, while the Average Variance Extracted (AVE) served to evaluate convergent validity.

Every construct recorded Cronbach's Alpha and Composite Reliability values above 0.70, pointing to satisfactory internal consistency. AVE values likewise cleared the 0.50 minimum, confirming that each construct accounts for more than half the variance in its indicators.

Table 4. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Digital Accounting	0.865	0.869	0.902	0.648
Financial Literacy	0.858	0.862	0.898	0.639
Human Capital	0.873	0.878	0.908	0.664
Financial Reporting Quality	0.869	0.874	0.904	0.653

Source: SmartPLS 4 Output, Processed Data (2026).

Cronbach's Alpha, rho_A, and Composite Reliability values exceed 0.70, while all AVE values exceed 0.50, supporting internal consistency and convergent validity. Taken together, these results show that the measurement model meets the recommended criteria for construct reliability and convergent validity.

Discriminant Validity

To confirm that each construct captured a genuinely distinct theoretical concept, discriminant validity was assessed with both the Fornell–Larcker Criterion and the Heterotrait–Monotrait Ratio (HTMT) (Henseler et al., 2015; Fornell & Larcker, 1981).

The Fornell–Larcker results show that, for every construct, the square root of the AVE is larger than its correlations with the other constructs. HTMT values also stayed

under the recommended threshold, confirming satisfactory discriminant validity (Henseler et al., 2015; Fornell & Larcker, 1981).

Table 5. Fornell–Larcker Criterion

Construct	DA	FL	HC	FRQ
DA	0.805			
FL	0.594	0.799		
HC	0.617	0.635	0.815	
FRQ	0.684	0.662	0.708	0.808

Source: SmartPLS 4 Output, Processed Data (2026).

The square root of each construct's AVE on the diagonal is higher than its correlations with the other constructs, supporting discriminant validity under the Fornell–Larcker criterion.

Table 6. Heterotrait–Monotrait Ratio (HTMT)

Construct	DA	FL	HC	FRQ
DA	–			
FL	0.708	–		
HC	0.731	0.756	–	
FRQ	0.812	0.791	0.826	–

Source: SmartPLS 4 Output, Processed Data (2026).

All HTMT values are below 0.90, indicating satisfactory discriminant validity among the constructs. Overall, these findings confirm that the measurement model has adequate reliability and validity, making it suitable for evaluating the structural model.

Structural Model Assessment

With the measurement model confirmed as adequate, the structural model was then evaluated by examining multicollinearity, explanatory power, predictive relevance, model fit, and the study hypotheses.

Collinearity Assessment

The Variance Inflation Factor (VIF) was used to check collinearity among predictor constructs. All VIF values fell under the commonly used ceiling of 5.00, showing that multicollinearity was not a problem.

Table 7. Full Collinearity VIF

Construct	Full Collinearity VIF
Digital Accounting	2.063
Financial Literacy	2.211
Human Capital	2.386
Financial Reporting Quality	2.547

Source: SmartPLS 4 Output, Processed Data (2026).

All full-collinearity VIF values are below 5.00, indicating that severe collinearity is not present among the constructs.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) was used to assess the structural model's explanatory power. Table 9 shows an R^2 of 0.672 and an adjusted R^2 of 0.662 for Financial Reporting Quality. This means that Digital Accounting, Financial Literacy, and Human Capital jointly explain 67.2% of the variance in Financial Reporting Quality, while 32.8% is explained by factors outside the model. The adjusted R^2 remains high after accounting for the number of predictors, indicating substantial explanatory power.

Table 8. Harman's Single-Factor Test

Measurement	Result
Variance Explained by First Factor	38.74%

Source: Processed data (2026).

The first factor explains 38.74% of the variance, below the 50% benchmark, suggesting that common method bias is unlikely to be a major concern. An R^2 of 0.672 means that Digital Accounting, Financial Literacy, and Human Capital together account for 67.2% of the variance in Financial Reporting Quality, with an adjusted R^2 of 0.662.

Predictive Relevance (Q^2)

The blindfolding procedure was used to assess predictive relevance. Table 12 reports a Q^2 value of 0.451 for Financial Reporting Quality. Because the Q^2 value is greater than zero, the model demonstrates predictive relevance for the endogenous construct.

Table 9. Structural Model Assessment

Endogenous Variable	R^2	Adjusted R^2
Financial Reporting Quality	0.672	0.662

Source: SmartPLS 4 Output, Processed Data (2026).

Financial Reporting Quality has an R^2 of 0.672 and an adjusted R^2 of 0.662, indicating that the three predictors jointly explain 67.2% of its variance.

Model Fit

Overall model fit was assessed using the Standardized Root Mean Square Residual (SRMR). Table 11 reports an SRMR of 0.061, which is below the commonly used 0.08 threshold, indicating an acceptable model fit.

Table 10. Effect Size (f^2)

Relationship	f^2	Interpretation
DA → FRQ	0.176	Medium
FL → FRQ	0.141	Small–Medium
HC → FRQ	0.258	Medium

Source: SmartPLS 4 Output, Processed Data (2026).

Human Capital has the largest effect size (f^2 = 0.258), followed by Digital Accounting (f^2 = 0.176) and Financial Literacy (f^2 = 0.141), indicating the strongest individual contribution of Human Capital.

Table 11. Model Fit

Fit Index	Value	Recommended
SRMR	0.061	<0.08

Source: SmartPLS 4 Output, Processed Data (2026).

The SRMR value of 0.061 is below 0.08, indicating an acceptable level of model fit.

Common Method Bias

Harman's Single-Factor Test was again used to check for potential common method bias. The first factor accounted for 38.74% of total variance, below the commonly applied 50% cutoff, suggesting common method bias is unlikely to undermine the validity of the findings (Kock, 2015).

Table 12. Predictive Relevance (Blindfolding)

Endogenous Variable	Q^2
Financial Reporting Quality	0.451

Source: SmartPLS 4 Output, Processed Data (2026).

The Q^2 value of 0.451 is greater than zero, indicating predictive relevance for Financial Reporting Quality.

Hypothesis Testing

A bootstrapping procedure with 5,000 resamples was used to test the proposed hypotheses, examining standardized path coefficients, t-statistics, and p-values.

Table 13. Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	DA → FRQ	0.301	4.512	0.000	Supported
H2	FL → FRQ	0.274	3.865	0.000	Supported
H3	HC → FRQ	0.347	5.028	0.000	Supported

Source: SmartPLS 4 Output, Processed Data (2026).

All three path coefficients are positive and statistically significant at the 5% level, supporting H1, H2, and H3.

Digital Accounting shows a positive influence on Financial Reporting Quality, meaning that putting digital accounting systems in place meaningfully improves the accuracy, efficiency, and transparency of financial reporting among MSMEs.

Financial Literacy likewise shows a positive and significant effect on Financial Reporting Quality, suggesting that MSME owners with a firmer grasp of financial knowledge are better placed to produce reliable financial reports and make well-informed financial decisions.

Human Capital carries the strongest positive effect on Financial Reporting Quality among the three predictors, indicating that competent employees with relevant accounting knowledge and professional experience are decisive in making digital accounting practices work and in producing high-quality financial information.

Discussion

The empirical results show that Financial Reporting Quality among MSMEs is shaped jointly by technological capability, financial competence, and organizational resources. Rather than operating in isolation, these three determinants reinforce each other in lifting the quality of accounting practices and financial information.

That Digital Accounting has a significant effect lends support to the Technology Acceptance Model (TAM), suggesting that accounting technologies seen as useful and easy to use push MSMEs toward more efficient and accurate financial reporting. This lines up with earlier studies reporting that digital accounting systems boost organizational transparency, cut recording errors, and improve the quality of decision-making (Davis, 1989).

The positive link found between Financial Literacy and Financial Reporting Quality is consistent with Behavioral Finance Theory, implying that financial knowledge helps business owners understand accounting information more effectively and produce more reliable financial reports. Managers with stronger financial literacy are also better able to use accounting technologies and to judge business performance on the basis of objective financial information (Lusardi & Mitchell, 2014).

Of the three predictors, Human Capital has the strongest influence on Financial Reporting Quality, with $\beta = 0.347$, $t = 5.028$, $p < 0.001$, and $f^2 = 0.258$. This effect is larger than the effects of Digital Accounting ($\beta = 0.301$; $f^2 = 0.176$) and Financial Literacy ($\beta = 0.274$; $f^2 = 0.141$). The finding fits the Resource-Based View's emphasis on organizational knowledge and employee competence as strategic resources. In practical terms, accounting technology and financial knowledge still depend on people who can operate accounting systems, interpret financial information, apply accounting procedures, and respond to reporting requirements. Human Capital therefore appears to be the strongest organizational mechanism through which digital tools and financial knowledge are translated into high-quality financial reporting.

Taken as a whole, the findings confirm that raising financial reporting quality calls for an integrated organizational strategy: investment in digital accounting technology needs to go hand in hand with ongoing development of financial literacy and human capital. Bringing these three dimensions together is the main contribution of this study, extending earlier literature by offering a more complete explanation of Financial Reporting Quality among MSMEs in emerging economies.

CONCLUSION

This study set out to examine how Digital Accounting, Financial Literacy, and Human Capital affect Financial Reporting Quality among Micro, Small, and Medium Enterprises (MSMEs) in Medan, Indonesia. Applying the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach, the empirical evidence shows that all three independent variables have a positive and significant effect on Financial Reporting Quality (Hair et al., 2022). Among the predictors studied, Human Capital stood out as the most influential, underscoring how crucial employees' competencies, accounting knowledge, and professional experience are to producing financial reports that are accurate, reliable, timely, and transparent. Digital accounting technology raises operational efficiency and reporting accuracy, but its success still rests largely on whether human resources can put accounting information systems to effective use. Financial literacy, for its part, strengthens managerial decision-making by deepening business owners' understanding of accounting information and financial-management practices.

Theoretically, this study extends existing literature by drawing the Technology Acceptance Model (TAM), Behavioral Finance Theory, and the Resource-Based View (RBV) together into one framework explaining Financial Reporting Quality in MSMEs. Where past studies mostly examined these determinants one at a time, this research shows that technological capability, financial competence, and organizational resources contribute jointly to better accounting information quality (Davis, 1989; Barney, 1991), (Lusardi & Mitchell, 2014).

On the practical side, the findings carry meaningful implications for government agencies, higher-education institutions, financial institutions, and MSME-development organizations. Policies aimed at improving MSME financial reporting should not center on technology adoption alone, but should also give weight to ongoing financial literacy programs and human capital development through professional education, technical training, and capacity-building efforts. Strategies that integrate these elements are expected to strengthen financial transparency, widen access to external financing, and boost the long-term competitiveness of MSMEs.

Even so, the study is not without limitations. First, its cross-sectional design captures organizational conditions at only one point in time. Second, respondents were confined to MSMEs in Medan, which limits how far the findings can be generalized to other locations. Third, only three explanatory variables were examined, while other organizational, technological, and environmental factors may also affect Financial Reporting Quality.

Future research would benefit from longitudinal designs, a wider geographical spread of respondents, and additional variables such as organizational culture, digital transformation capability, internal control systems, corporate governance, and technological readiness, so as to build a more complete picture of what drives Financial Reporting Quality among MSMEs.

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