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Enabling True Performance Accountability: Cloud Seamless Integration Between Finance Systems and Gain Real Time Insights on Budget Costs

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ABSTRACT

This study examines the relationships between cloud-based financial system integration, real-time budget cost visibility, financial information transparency, and performance accountability in Indonesian organizations. Employing a quantitative explanatory approach, data were collected from 100 financial management professionals selected through purposive sampling and analyzed using multiple linear regression with SPSS version 25. The findings reveal that cloud-based financial system integration, real-time budget cost visibility, and financial information transparency are positively and significantly associated with performance accountability. Real-time budget cost visibility demonstrates the strongest association, highlighting the importance of timely financial information for effective budget monitoring and financial oversight. The regression model is statistically significant ($F = 12.584$, $p < 0.001$) and explains 28.2% of the variance in performance accountability. Theoretically, this study extends the Information Systems Success Model by examining technological integration and financial information capabilities as distinct dimensions associated with organizational accountability. Practically, the findings emphasize the importance of integrated financial systems, timely budget information, and transparent financial reporting in supporting accountable financial management. The cross-sectional design and purposive sampling limit causal inference and generalizability.

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1. INTRODUCTION

The rapid advancement of digital technologies has transformed organizational financial management by improving how financial information is processed, integrated, and utilized to support performance accountability. Organizations are increasingly expected to demonstrate transparency, efficiency, and responsibility in financial resource allocation and budget implementation. The International Federation of Accountants (IFAC, 2026) emphasizes that effective governance requires transparent decision-making, robust internal controls, and accountability for organizational outcomes. Nevertheless, fragmented financial systems, inconsistent reporting, and delayed budget information continue to constrain financial oversight. DeLone and McLean (2003) argue that information system effectiveness depends on system quality, information quality, and

organizational benefits, indicating that technological adoption alone does not guarantee stronger accountability. Consequently, integrated digital financial management has become increasingly important for improving financial transparency and evidence-based decision-making.

Cloud computing offers opportunities to address financial information fragmentation through centralized data management, interconnected applications, and improved information accessibility. Nguyen Phu, Hoang Thi, and Tran Nguyen Bich (2025) demonstrate that cloud accounting adoption supports financial management effectiveness through system integration and more efficient financial operations. Similarly, Carlsson-Wall, Goretzki, Hofstedt, Kraus, and Nilsson (2022) highlight the potential of cloud-based enterprise resource planning systems to improve accounting processes and information transparency, although system flexibility and organizational requirements remain significant challenges. Beyond technological integration, real-time budget cost visibility enables organizations to monitor expenditures, identify budget deviations, and implement timely corrective actions. Financial information transparency further strengthens oversight by improving the accessibility, completeness, and traceability of financial records. These capabilities are particularly relevant in Indonesia, where Presidential Regulation No. 95 of 2018 and Minister of Home Affairs Regulation No. 70 of 2019 reinforce institutional commitments to integrated digital information systems and accountable financial governance.

The relationship between digital financial capabilities and performance accountability can be explained through the Information Systems Success Model developed by DeLone and McLean (2003). This framework emphasizes the contribution of system quality and information quality to organizational benefits. Within financial management, cloud-based financial system integration represents technological capability, real-time budget cost visibility reflects information timeliness and decision relevance, and financial information transparency captures the accessibility and traceability of financial records. These dimensions provide complementary mechanisms for strengthening financial oversight and organizational accountability. Consistent with the governance principles emphasized by IFAC and the Chartered Institute of Public Finance and Accountancy (CIPFA, 2026), reliable and transparent financial information is essential for responsible resource management. However, the effectiveness of these capabilities depends on their practical implementation rather than the mere availability of digital infrastructure.

Previous empirical studies have established important relationships between cloud technology and financial management effectiveness. Nguyen Phu, Hoang Thi, and Tran Nguyen Bich (2025) investigated cloud accounting adoption among Vietnamese businesses, while Carlsson-Wall, Goretzki, Hofstedt, Kraus, and Nilsson (2022) examined changes in accounting practices associated with cloud-based systems in the public sector. More specifically, Kusumba (2024) identified significant relationships among financial system integration, cloud capabilities, real-time budget insights, and performance accountability in the United States energy and utilities sector. However, these studies primarily emphasize technology adoption, accounting practices, or sector-specific accountability mechanisms. Limited attention has been given to examining cloud-based financial system integration, real-time budget cost visibility, and financial information transparency simultaneously as distinct explanatory variables associated with performance accountability in Indonesia. This gap is important because financial management efficiency does not necessarily translate into accountability, which additionally requires the justification, evaluation, and responsible management of organizational resources.

Addressing this gap, the present study investigates the individual and simultaneous relationships of cloud-based financial system integration, real-time budget cost visibility, and financial information transparency with performance accountability in Indonesia. The study contributes to the literature by extending the application of the Information Systems Success Model to performance accountability and distinguishing technological integration from the informational capabilities supporting financial governance. Unlike prior research emphasizing cloud adoption or mediation mechanisms, this study examines the direct associations of three complementary financial

management dimensions within a unified empirical framework. Its primary contribution lies in providing context-specific evidence on how digital financial capabilities relate to organizational accountability. Practically, the findings are intended to inform financial managers, accountants, and organizational decision-makers about the importance of interoperable financial systems, timely budget monitoring, and transparent financial reporting in strengthening accountability practices.

2. LITERATURE REVIEW

2.1 Theoretical Foundation

The Information Systems Success Model developed by DeLone and McLean (2003) explains how system quality, information quality, service quality, system use, user satisfaction, and net benefits contribute to organizational effectiveness. In financial management, cloud-based financial system integration represents system quality, while real-time budget cost visibility and financial information transparency reflect information-related capabilities that support financial oversight and decision-making. Complementing this perspective, Accountability Theory emphasizes the responsibility of organizational actors to explain, justify, and evaluate their decisions and resource utilization (Bovens, 2007). Together, these theories provide a conceptual foundation for examining how technological integration, timely budget information, and financial transparency are associated with performance accountability, emphasizing that effective accountability requires both reliable financial information and appropriate governance mechanisms.

2.2 Cloud-Based Financial System Integration

Cloud-based financial system integration refers to the interconnection of accounting, budgeting, procurement, and financial reporting systems through cloud infrastructure to improve data consistency, accessibility, and operational coordination. Mell and Grance (2011) emphasize that cloud computing provides scalable, on-demand computing resources that support integrated information processing. Moll and Yigitbasioglu (2019) further highlight the role of cloud technologies in transforming accounting practices and facilitating timely financial decision-making. Empirical evidence from Nguyen Phu et al. (2025) and Carlsson-Wall et al. (2022) indicates that cloud integration can improve financial management effectiveness, although its benefits depend on system flexibility and organizational readiness. In this study, cloud-based financial system integration encompasses application interconnectedness, financial data consistency, information accessibility, and process coordination, which are expected to support more reliable budget monitoring and stronger performance accountability.

2.3 Real-Time Budget Cost Visibility

Real-time budget cost visibility refers to the availability and accessibility of updated financial information that enables organizations to monitor budget allocations, expenditures, and financial variances for timely decision-making. DeLone and McLean (2003) emphasize that information quality, particularly timeliness and relevance, is essential for effective organizational information systems. Real-time budget monitoring facilitates early identification of expenditure deviations, strengthens financial oversight, and supports corrective actions. Kusumba (2024) provides empirical evidence of a positive relationship between real-time budget insights and performance accountability, although its applicability to Indonesian organizations requires further examination. In this study, real-time budget cost visibility is measured through perceived information timeliness, budget realization monitoring, variance

identification, and the usefulness of updated financial data, which are expected to be positively associated with performance accountability.

2.4 Financial Information Transparency

Financial information transparency refers to the accessibility, clarity, completeness, and traceability of financial information that enables stakeholders to evaluate organizational financial activities. Bovens (2007) emphasizes that accountability requires organizational actors to explain and justify their decisions, highlighting transparency as an essential foundation for financial oversight. Khatri and Brown (2010) further demonstrate that effective data governance supports information reliability, consistency, and appropriate access controls. Cloud-based financial systems may enhance transparency through centralized records, standardized reporting, and accessible audit trails, although their effectiveness depends on organizational governance practices. In this study, financial information transparency is measured through reporting clarity, information accessibility, record completeness, and transaction traceability, which are expected to be positively associated with performance accountability.

2.5 Performance Accountability

Performance accountability refers to the responsibility of organizational actors to explain, justify, and evaluate financial decisions, resource utilization, and organizational outcomes against established objectives. Bovens (2007) emphasizes that accountability extends beyond financial reporting to include responsibility, justification, and performance evaluation. Digital financial systems can support accountability by improving information consistency, budget monitoring, and transaction traceability, although their effectiveness also depends on internal controls and organizational governance. In Indonesia, Presidential Regulation No. 95 of 2018 reinforces the importance of integrated digital information systems for strengthening public sector governance. In this study, performance accountability is measured through financial responsibility reporting, budget utilization justification, performance evaluation, and corrective actions, reflecting respondents' perceptions of organizational accountability practices rather than independently audited outcomes.

2.6 Empirical Studies and Research Gap

Previous studies have demonstrated the potential of cloud-based technologies to improve financial management and organizational performance. Carlsson-Wall et al. (2022) found that cloud-based enterprise resource planning systems enhanced accounting efficiency and information transparency, although system inflexibility remained a challenge. Nguyen Phu et al. (2025) highlighted the importance of system integration and cloud accounting adoption in improving financial management effectiveness. Similarly, Kusumba (2024) identified positive relationships among financial system integration, real-time budget insights, and performance accountability, including the mediating role of budget visibility. However, existing research has primarily focused on technology adoption, financial efficiency, or sector-specific mediation mechanisms, with limited evidence examining the distinct contributions of cloud-based financial system integration, real-time budget cost visibility, and financial information transparency to performance accountability in Indonesia. Addressing this gap, the present study employs multiple linear regression to assess their individual and combined associations with performance accountability, providing context-specific empirical evidence on the relationship between digital financial capabilities and organizational accountability.

2.7 Hypotheses Development

Cloud-based financial system integration, real-time budget cost visibility, and financial information transparency are expected to be positively associated with performance accountability through improved financial information quality and governance. According to DeLone and McLean (2003), system quality and information quality contribute to organizational benefits by supporting reliable information processing and decision-making. Cloud-based integration facilitates consistent financial records, coordinated reporting, and expenditure monitoring, as supported by Carlsson-Wall et al. (2022) and Nguyen Phu et al. (2025). Meanwhile, real-time budget cost visibility enables timely identification of expenditure deviations and more effective budgetary control. Kusumba (2024) provides empirical evidence linking real-time budget insights with stronger performance accountability. Financial information transparency further supports accountability by ensuring that financial records are accessible, complete, and traceable. Bovens (2007) emphasizes that accountability requires the explanation and justification of organizational decisions, while Khatri and Brown (2010) highlight the importance of data governance in maintaining information reliability and transparency.

Although these three dimensions represent distinct financial management capabilities, their combined contribution may provide a stronger informational foundation for performance accountability. Cloud-based integration facilitates interconnected financial processes, real-time budget visibility supports timely financial oversight, and information transparency enables stakeholders to evaluate resource utilization and financial decisions. Consistent with the Information Systems Success Model (DeLone & McLean, 2003) and Accountability Theory (Bovens, 2007), these capabilities are expected to strengthen organizational accountability through improved information accessibility, monitoring, and financial responsibility. Accordingly, this study examines their individual and simultaneous relationships with performance accountability using multiple linear regression. Based on these theoretical and empirical arguments, the following hypotheses are proposed:

H1: Cloud-based financial system integration has a positive and statistically significant relationship with performance accountability in Indonesia.

H2: Real-time budget cost visibility has a positive and statistically significant relationship with performance accountability in Indonesia.

H3: Financial information transparency has a positive and statistically significant relationship with performance accountability in Indonesia.

H4: Cloud-based financial system integration, real-time budget cost visibility, and financial information transparency are jointly and significantly associated with performance accountability in Indonesia.

3. METHODS

3.1 Research Design

This study adopts a quantitative explanatory design using a cross-sectional survey to examine the relationships between cloud-based financial system integration (X1), real-time budget cost visibility (X2), financial information transparency (X3), and performance accountability (Y) in Indonesia. Data are collected through structured questionnaires and analyzed using multiple linear regression in SPSS version 25 to assess the individual and simultaneous relationships among variables. Given the cross-sectional design, the findings are interpreted as statistical associations rather than causal effects.

3.2 Population and Sampling Technique

The study involves 100 financial management professionals in Indonesia, including accountants, financial managers, budget officers, and internal auditors, selected through purposive sampling. Respondents must have relevant experience in financial information systems, budgeting, or financial reporting. The sample supports multiple linear regression with three independent variables, although the non-probability sampling approach limits the generalizability of the findings.

3.3 Data Collection Procedures

Primary data are collected through a structured questionnaire assessing respondents' perceptions of digital financial integration, budget monitoring, financial transparency, and performance accountability. The questionnaire covers respondent characteristics and four research variables and is distributed online or directly to eligible participants. Participation is voluntary, with confidentiality assured. Responses are screened for completeness, duplicates, and inconsistencies before analysis using SPSS version 25.

3.4 Operational Definitions and Measurement of Variables

The study examines three independent variables: cloud-based financial system integration (X1), reflecting interconnected financial systems; real-time budget cost visibility (X2), representing timely access to budget and expenditure information; and financial information transparency (X3), encompassing information accessibility, clarity, completeness, and traceability. Performance accountability (Y) serves as the dependent variable, reflecting responsibility for financial decisions, budget utilization, and performance evaluation. Each variable is measured using four questionnaire indicators, as presented in Table 1.

Table 1. Operational Definitions and Measurement Indicators

Variable	Code	Measurement Indicators	Scale
Cloud-Based Financial System Integration (X1)	CFSI1	Integration of financial applications through cloud-based systems	Likert 1–5
	CFSI2	Consistency of financial data across organizational departments	Likert 1–5
	CFSI3	Accessibility of integrated financial information	Likert 1–5
	CFSI4	Coordination of accounting, budgeting, and reporting processes	Likert 1–5
Real-Time Budget Cost Visibility (X2)	RBCV1	Availability of updated budget expenditure information	Likert 1–5
	RBCV2	Timeliness of budget realization monitoring	Likert 1–5
	RBCV3	Identification of deviations between planned and actual expenditures	Likert 1–5
	RBCV4	Utilization of updated budget information for financial decisions	Likert 1–5
Financial Information Transparency (X3)	FIT1	Clarity and comprehensibility of financial reporting	Likert 1–5
	FIT2	Accessibility of financial records to authorized stakeholders	Likert 1–5
	FIT3	Completeness of financial information for expenditure evaluation	Likert 1–5
	FIT4	Traceability of financial transactions and supporting documentation	Likert 1–5
Performance Accountability (Y)	PA1	Responsibility for explaining budget utilization	Likert 1–5

	PA2	Evaluation of financial performance against established objectives	Likert 1–5
	PA3	Monitoring of accountability for financial decisions and expenditures	Likert 1–5
	PA4	Implementation of corrective actions for financial performance deviations	Likert 1–5

The questionnaire comprises 16 items across four constructs, measured on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). Following validity and reliability testing, composite scores are calculated by averaging retained items for descriptive and regression analyses. As the indicators are newly developed, content validity and internal consistency must be established before interpreting the results.

3.5 Data Analysis Techniques

Data were analyzed using SPSS version 25, including descriptive statistics, validity and reliability testing, classical assumption testing, multiple linear regression, hypothesis testing, and coefficient of determination. Descriptive statistics included frequencies, percentages, means, standard deviations, and minimum and maximum values. Instrument validity was assessed using corrected item-total correlations (>0.30), while reliability was evaluated using Cronbach's alpha (≥0.70). Classical assumptions were examined through the Kolmogorov–Smirnov test for residual normality ($p > 0.05$), tolerance (>0.20) and variance inflation factor (VIF < 5) for multicollinearity, and residual scatterplots for heteroscedasticity and linearity. Potential influential observations were assessed using standardized residuals, leverage statistics, and Cook's distance. Multiple linear regression was employed to estimate the associations between cloud-based financial system integration (X1), real-time budget cost visibility (X2), financial information transparency (X3), and performance accountability (Y). Partial t-tests evaluated H1–H3, requiring statistically significant positive coefficients ($p < 0.05$), while the simultaneous F-test assessed overall model significance (H4) at $p < 0.05$. Finally, R^2 and adjusted R^2 were used to evaluate the proportion of variance in performance accountability explained by the predictors, without implying causal relationships.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistical Analysis

Descriptive statistics were calculated for each construct using the mean of four items measured on a five-point Likert scale, including observations, minimum, maximum, mean, and standard deviation.

Table 2. Descriptive Statistics of Research Variables

Variable	N	Min.	Max.	Mean	Std. Deviation
Cloud-Based Financial System Integration (X1)	100	1.50	5.00	3.402	0.686
Real-Time Budget Cost Visibility (X2)	100	1.75	5.00	3.502	0.772
Financial Information Transparency (X3)	100	1.75	5.00	3.340	0.710
Performance Accountability (Y)	100	1.00	5.00	3.480	0.746

Table 2 presents the descriptive statistics for 100 respondents across four research variables. Real-Time Budget Cost Visibility (X2) recorded the highest mean (3.502; SD = 0.772), followed by Performance Accountability (Y) (3.480; SD = 0.746), Cloud-Based Financial System Integration (X1) (3.402; SD = 0.686), and Financial Information Transparency (X3) (3.340; SD = 0.710). The observed minimum scores ranged from 1.00 to 1.75 for most variables, except X1 (1.50), while all variables reached a maximum of 5.00. Overall, the mean scores indicate moderately positive respondent perceptions across the four constructs, with relatively limited variation in responses.

4.2 *Validity and Reliability Testing*

4.2.1 Validity Testing

The measurement instrument was evaluated using corrected item-total correlations, with values above 0.30 indicating acceptable item consistency within each construct.

Table 3. Corrected Item-Total Correlation Results

Variable	Item	Corrected Item-Total Correlation
Cloud-Based Financial System Integration	CFSI1	0.684
	CFSI2	0.662
	CFSI3	0.560
	CFSI4	0.669
Real-Time Budget Cost Visibility	RBCV1	0.748
	RBCV2	0.724
	RBCV3	0.635
	RBCV4	0.787
Financial Information Transparency	FIT1	0.673
	FIT2	0.644
	FIT3	0.715
	FIT4	0.686
Performance Accountability	PA1	0.694
	PA2	0.623
	PA3	0.722
	PA4	0.663

Table 3 presents the corrected item-total correlation results for 16 measurement items across four constructs. All items exceeded the recommended threshold of 0.30, with correlations ranging from 0.560 to 0.787. Cloud-Based Financial System Integration recorded values of 0.560–0.684, Real-Time Budget Cost Visibility 0.635–0.787, Financial Information Transparency 0.644–0.715, and Performance Accountability 0.623–0.722. These findings indicate satisfactory item consistency within each construct, supporting the retention of all 16 items for subsequent reliability testing and regression analysis.

4.2.2 Reliability Testing

Reliability was assessed using Cronbach's alpha, with a threshold of 0.70 for acceptable internal consistency.

Table 4. Reliability Test Results

Variable	Number of Items	Cronbach's Alpha	Decision
Cloud-Based Financial System Integration (X1)	4	0.818	Reliable
Real-Time Budget Cost Visibility (X2)	4	0.870	Reliable
Financial Information Transparency (X3)	4	0.844	Reliable
Performance Accountability (Y)	4	0.842	Reliable

Table 4 presents the reliability test results for four constructs, each measured using four items. Cronbach's alpha values ranged from 0.818 to 0.870, exceeding the recommended threshold of 0.70. Real-Time Budget Cost Visibility demonstrated the highest reliability (α = 0.870), followed by Financial Information Transparency (α = 0.844), Performance Accountability (α = 0.842), and Cloud-Based Financial System Integration (α = 0.818). These findings indicate satisfactory internal consistency across all constructs, supporting the reliability of the measurement instruments for subsequent statistical analyses.

4.3 Classical Assumption Testing

4.3.1 Normality Test

Normality was assessed using the Kolmogorov–Smirnov test with Lilliefors correction on unstandardized regression residuals, with $p > 0.05$ indicating no significant deviation from normality.

Table 5. Kolmogorov–Smirnov Normality Test

Parameter	Value
Number of Observations (N)	100
Test Distribution	Normal
Kolmogorov–Smirnov Statistic	0.050
Significance (Lilliefors correction)	0.776
Significance Level (α)	0.050

Table 5 presents the Kolmogorov–Smirnov normality test results for 100 observations. The test yielded a statistic of 0.050 and a Lilliefors-corrected significance value of 0.776, exceeding the 0.05 significance threshold. These findings indicate no statistically significant deviation from normality, suggesting that the regression residuals satisfy the normality assumption and supporting the application of multiple linear regression analysis.

4.3.2 Multicollinearity Test

Multicollinearity was assessed using tolerance (>0.20) and variance inflation factor (VIF < 5) thresholds.

Table 6. Multicollinearity Test Results

Independent Variable	Tolerance	VIF
Cloud-Based Financial System Integration (X1)	0.875	1.142
Real-Time Budget Cost Visibility (X2)	0.764	1.310
Financial Information Transparency (X3)	0.850	1.177

Table 6 presents the multicollinearity test results for the three independent variables. Tolerance values ranged from 0.764 to 0.875, exceeding the recommended threshold of 0.20, while variance inflation factor (VIF) values ranged from 1.142 to 1.310, remaining below the threshold of 5. Specifically, Cloud-Based Financial System Integration (X1) recorded a VIF of 1.142, Real-Time Budget Cost Visibility (X2) 1.310, and Financial Information Transparency (X3) 1.177. These findings indicate no severe multicollinearity among the independent variables, supporting their simultaneous inclusion in the multiple linear regression model.

4.3.3 Heteroscedasticity Test

Heteroscedasticity was assessed using the Breusch–Pagan test at a 0.05 significance level.

Table 7. Breusch–Pagan Heteroscedasticity Test

Test Statistic	Value
Lagrange Multiplier Statistic	1.428
Chi-Square Degrees of Freedom	3
Significance Value	0.699

Table 7 presents the Breusch–Pagan heteroscedasticity test results, yielding a Lagrange Multiplier statistic of 1.428 with three degrees of freedom and a significance value of 0.699. Since the p-value exceeds the 0.05 significance threshold, the null hypothesis of homoscedasticity is not rejected. These findings indicate no statistically significant evidence of heteroscedasticity, suggesting

that the constant error variance assumption is reasonably satisfied and supporting the use of ordinary least squares regression.

4.4 Multiple Linear Regression Analysis

The regression model includes three independent variables and one dependent variable. Table 8 presents the estimated regression coefficients, standard errors, standardized coefficients, t-statistics, and significance values.

Table 8. Multiple Linear Regression Results

Variable	B	Std. Error	Beta	t	Sig.
Constant	0.961	0.428	—	2.243	0.027
Cloud-Based Financial System Integration (X1)	0.245	0.100	0.226	2.444	0.016
Real-Time Budget Cost Visibility (X2)	0.288	0.096	0.298	3.014	0.003
Financial Information Transparency (X3)	0.202	0.099	0.192	2.047	0.043

Table 8 presents the multiple linear regression results, indicating that all three independent variables are positively and significantly associated with Performance Accountability. Real-Time Budget Cost Visibility (X2) exhibits the strongest standardized association (B = 0.288, β = 0.298, t = 3.014, p = 0.003), followed by Cloud-Based Financial System Integration (X1) (B = 0.245, β = 0.226, t = 2.444, p = 0.016) and Financial Information Transparency (X3) (B = 0.202, β = 0.192, t = 2.047, p = 0.043). The regression constant is 0.961 (p = 0.027), yielding the estimated equation Y = 0.961 + 0.245X1 + 0.288X2 + 0.202X3. All predictors meet the 0.05 significance threshold, supporting H1, H2, and H3. These findings suggest that stronger digital financial integration, timely budget visibility, and financial transparency are independently associated with higher perceived performance accountability.

4.4.1 Simultaneous Significance Test (F-Test)

The simultaneous F-test assessed the joint statistical significance of cloud-based financial system integration, real-time budget cost visibility, and financial information transparency in explaining performance accountability.

Table 9. ANOVA and Simultaneous F-Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.548	3	5.183	12.584	<0.001
Residual	39.537	96	0.412	—	—
Total	55.085	99	—	—	—

Table 9 presents the ANOVA and simultaneous F-test results, indicating that the multiple linear regression model is statistically significant ($F(3, 96) = 12.584$, $p < 0.001$). The regression sum of squares was 15.548, compared with a residual sum of squares of 39.537 and a total sum of squares of 55.085. These findings demonstrate that Cloud-Based Financial System Integration, Real-Time Budget Cost Visibility, and Financial Information Transparency jointly explain a statistically significant proportion of the variation in Performance Accountability, supporting H4.

4.4.2 Coefficient of Determination

The model summary indicates a moderate multiple correlation (R = 0.531), with an R^2 of 0.282 and an adjusted R^2 of 0.260. These results suggest that Cloud-Based Financial System Integration, Real-Time Budget Cost Visibility, and Financial Information Transparency collectively explain 28.2% of the variance in Performance Accountability, while the remaining 71.8% is attributable to factors not captured by the model and unexplained variation. The standard error of

the estimate (0.642) reflects the residual variability in predicted performance accountability, indicating modest explanatory power.

4.5 Discussion

The findings demonstrate that Cloud-Based Financial System Integration, Real-Time Budget Cost Visibility, and Financial Information Transparency are positively and significantly associated with Performance Accountability in Indonesian organizations. These results support the Information Systems Success Model proposed by DeLone and McLean (2003), which emphasizes the importance of system quality and information quality in generating organizational benefits. Specifically, cloud-based financial integration is associated with stronger accountability through improved financial data consistency, information accessibility, and coordination across accounting and budgeting functions. This finding aligns with Carlsson-Wall et al. (2022), who highlighted the contribution of cloud-based enterprise resource planning systems to accounting efficiency and information transparency, and Nguyen Phu et al. (2025), who identified system integration as an important component of cloud accounting adoption and financial management effectiveness. However, these relationships should be interpreted as statistical associations rather than causal effects, given the cross-sectional research design.

Among the three predictors, Real-Time Budget Cost Visibility exhibits the strongest standardized association with Performance Accountability, highlighting the importance of timely financial information for effective budget monitoring and expenditure evaluation. This finding is consistent with Kusumba (2024), who demonstrated a positive relationship between real-time budget insights and performance accountability. Access to updated budget information may enable organizations to identify expenditure deviations, evaluate resource allocation, and support timely managerial responses. Financial Information Transparency also demonstrates a significant positive association with Performance Accountability, reinforcing the argument of Bovens (2007) that accountability requires organizational actors to explain and justify their decisions to relevant stakeholders. Similarly, Khatri and Brown (2010) emphasize that effective data governance strengthens information reliability, accessibility, and traceability. Together, these findings suggest that digital financial integration should be accompanied by timely budget information and transparent reporting practices to support meaningful financial oversight.

Theoretically, this study extends the application of the Information Systems Success Model and Accountability Theory by examining technological integration, budget visibility, and information transparency as distinct explanatory dimensions of Performance Accountability within an Indonesian organizational context. Unlike Kusumba (2024), who emphasized the mediating role of real-time budget insights, the present study provides evidence of their individual and simultaneous statistical associations with accountability. Nevertheless, the model explains 28.2% of the variance in Performance Accountability, indicating that additional organizational factors, including internal control effectiveness, managerial competence, and governance practices, may warrant further investigation. Practically, the findings highlight the importance of strengthening financial system interoperability, improving access to updated budget information, and maintaining transparent financial reporting procedures. However, the reliance on self-reported, cross-sectional data and purposive sampling limits causal interpretation and statistical generalizability. Future research should incorporate longitudinal designs, objective financial performance indicators, and broader organizational samples to provide more robust evidence regarding the relationship between digital financial capabilities and performance accountability.

5. CONCLUSION

This study concludes that cloud-based financial system integration, real-time budget cost visibility, and financial information transparency are positively and significantly associated with

performance accountability in Indonesian organizations. Real-time budget cost visibility exhibits the strongest relationship, emphasizing the importance of timely and accessible financial information in supporting budget monitoring, expenditure evaluation, and managerial accountability. The findings also demonstrate that technological integration and transparent financial reporting represent complementary dimensions of effective financial governance. By examining these factors within a unified empirical framework, this study contributes to the Information Systems Success Model and Accountability Theory, highlighting the relevance of technological and informational capabilities to organizational accountability. From a practical perspective, organizations should prioritize financial system interoperability, real-time budget monitoring, and reliable reporting mechanisms to strengthen financial oversight. However, the model's modest explanatory power, cross-sectional design, self-reported measurements, and purposive sampling indicate the need for further investigation. Future research should incorporate broader samples, longitudinal approaches, and additional governance-related variables to deepen understanding of performance accountability in digitally integrated financial environments.

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