

Digital Governance and Financial Reporting Quality: Evidence from SIPD Implementation

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Abstract

Improving the quality of local government financial reporting remains an important challenge despite the increasing implementation of digital governance systems. This study examines the influence of *Sistem Informasi Pemerintahan Daerah* (SIPD) implementation on financial reporting quality and investigates the moderating role of information technology utilization. Using a quantitative explanatory design, data were collected from 179 respondents within regional government organizations and analyzed using Moderated Regression Analysis. The findings reveal that SIPD implementation significantly improves financial reporting quality, while information technology utilization both improves financial reporting quality and strengthens the positive effect of SIPD implementation. The study extends the Technology–Organization–Environment framework by demonstrating that information technology utilization serves as a critical organizational capability that enhances the effectiveness of digital governance. Practically, local governments should prioritize user capability, digital readiness, and effective technology utilization to maximize the benefits of SIPD implementation and improve financial reporting quality, accountability, and transparency.

Keywords: SIPD Implementation, Digital Governance, Financial Reporting Quality, Information Technology Utilization, and Local Government Finance.

INTRODUCTION

Digital transformation in public sector governance has fundamentally reshaped how governments generate, manage, and communicate financial information within increasingly integrated administrative environments. In contemporary governance discourse, digital governance is no longer confined to the technical adoption of information systems but is increasingly understood as an institutional mechanism through which transparency, accountability, interoperability, and fiscal responsiveness are operationalized in governmental practice (Bu, 2025; Meng et al., 2025). The growing integration of digital infrastructures into public administration has intensified efforts to standardize financial procedures, improve data consistency, and strengthen the traceability of public expenditures, thereby reinforcing the

credibility of financial reporting systems (Jin & Wang, 2025). Studies on digital government construction further indicate that digitally integrated institutions tend to exhibit stronger governance capacity because the consolidation of information systems contributes to more transparent fiscal supervision and more reliable administrative outcomes (Bu, 2025). Within financial reporting contexts, digitalization has increasingly been associated with improvements in reporting quality because integrated systems facilitate more accurate data processing, reduce procedural fragmentation, and strengthen internal monitoring practices (Ibrahim et al., 2025). Similarly, evidence from accounting information systems literature suggests that digitalized governance mechanisms may reduce weaknesses in internal control structures while improving information reliability, particularly when technological infrastructures are embedded consistently into organizational processes (Shi & Zhang, 2025; Zong & Wang, 2025). Recent evidence from Indonesian accounting research likewise indicates that digital transformation is expected to improve organizational efficiency, transparency, and monitoring processes, although its effectiveness depends on the extent to which digital systems are supported by adequate internal control mechanisms and organizational implementation capacity (Amanda et al., 2025). However, emerging findings also suggest that the relationship between digital governance and financial reporting quality is not always uniform across institutional settings because organizational readiness, governance maturity, and technological capacity may shape how digital systems are translated into administrative outcomes (Liu et al., 2024). This variability raises important questions regarding the organizational conditions under which digital governance mechanisms are capable of generating high-quality financial reporting within public sector institutions.

In Indonesia, the implementation of the *Sistem Informasi Pemerintahan Daerah* (SIPD) represents a strategic governmental response to strengthen the integration of planning, budgeting, administration, and financial reporting across regional governments through a centralized digital platform. Introduced as part of Indonesia's bureaucratic reform agenda, SIPD aims to reduce data fragmentation among regional agencies, improve coordination across governmental units, and support more transparent fiscal administration through integrated information management (Razak & Anriani, 2024). Existing studies generally report positive implications of SIPD implementation for regional financial administration, particularly in improving expenditure administration, facilitating information consolidation, and increasing procedural efficiency in local financial management (Bernika et al., 2023; Mendriadi et al., 2024). Evidence from provincial and district government settings further

suggests that SIPD contributes to more systematic financial governance by enhancing reporting consistency and strengthening accountability mechanisms in public financial administration (Nangoy et al., 2025). Likewise, studies examining SIPD effectiveness in local government institutions have highlighted its role in supporting administrative effectiveness through streamlined reporting procedures and improved accessibility of financial information (Pinontoan et al., 2025). Consistent with these developments, studies conducted in Indonesian public-sector organizations demonstrate that the implementation of Government Accounting Standards and competent human resources significantly contribute to improving the quality of government financial reports, emphasizing that digital financial systems must operate alongside sound accounting standards and organizational capabilities to produce reliable reporting outcomes (Kartika & Ningsih, 2024). Nevertheless, the reported effectiveness of SIPD remains uneven across regional contexts. While some local governments experience improvements in transparency, administrative coordination, and reporting quality, other contexts continue to encounter challenges related to bureaucratic adaptation, technological instability, and varying levels of institutional readiness (Mendriadi et al., 2024; Razak & Anriani, 2024). These inconsistencies indicate that the presence of SIPD alone may not sufficiently explain variations in financial reporting quality, suggesting that additional organizational conditions may influence how SIPD functions in practice.

One organizational condition that warrants closer attention concerns the extent to which information technology is effectively utilized within governmental institutions. In organizational information systems literature, information technology utilization extends beyond the formal availability of technological infrastructure and instead reflects the capacity of institutions and users to integrate technology into routine work processes that produce relevant, timely, and reliable information (Purnamasari et al., 2025). Prior studies have shown that effective technology utilization may enhance financial reporting quality by accelerating data processing, reducing reporting errors, and strengthening internal control systems that improve reporting reliability (Ibrahim et al., 2025; Shi & Zhang, 2025). Research on digital financialization and governance also suggests that technological systems tend to generate stronger institutional outcomes when users possess adequate technological competencies and organizations maintain supportive digital infrastructures (Liu et al., 2024; Zong & Wang, 2025). This argument is consistent with recent findings suggesting that digital transformation alone is insufficient to improve organizational outcomes unless it is accompanied by effective

internal control and appropriate organizational support, highlighting the importance of complementary organizational mechanisms in realizing the benefits of digital technologies (Amanda et al., 2025). Conversely, inadequate technological readiness, unstable infrastructures, and limited digital competencies may weaken the effectiveness of digital systems despite their formal implementation, potentially resulting in inconsistencies in administrative reporting and information quality (Meng et al., 2025). Within the SIPD context, studies grounded in technology acceptance perspectives similarly indicate that system effectiveness may depend on users' innovativeness and technological acceptance, implying that successful system implementation cannot be detached from the quality of technology utilization in organizational practice (Umaira & Setyaningrum, 2025). Such findings suggest that information technology utilization may function as a conditional mechanism that shapes the extent to which SIPD implementation contributes to improvements in financial reporting quality.

Despite increasing scholarly attention toward digital governance and SIPD implementation, previous studies have primarily examined SIPD effectiveness, information technology utilization, and financial reporting quality as separate research domains rather than exploring their interrelationships within an integrated explanatory framework. Existing SIPD research has largely focused on expenditure administration, implementation effectiveness, and financial management procedures without adequately explaining how variations in information technology utilization influence the extent to which SIPD implementation improves financial reporting quality (Bernika et al., 2023; Nangoy et al., 2025). Similarly, broader digital governance studies have emphasized transparency, institutional performance, and governance capacity while paying comparatively limited attention to the organizational mechanisms through which information technology utilization shapes the effectiveness of digital government systems in producing high-quality financial reporting (Bu, 2025; Jin & Wang, 2025). Furthermore, governance research suggests that stronger governance mechanisms enhance financial transparency by reducing information asymmetry and improving reporting reliability, indicating that governance quality and technological capability should be examined jointly rather than independently when explaining financial reporting outcomes (Winoto & Bandi, 2024). In local government settings characterized by differences in bureaucratic readiness, technological infrastructure, and digital capability, information technology utilization may therefore represent a critical organizational condition determining whether SIPD implementation effectively enhances financial reporting quality.

To the best of our knowledge, no previous study has simultaneously examined SIPD implementation, information technology utilization, and financial reporting quality within a single analytical framework grounded in the Technology–Organization–Environment (TOE) framework. The novelty of this study lies in conceptualizing information technology utilization as a moderating organizational capability that conditions the effectiveness of SIPD implementation in improving financial reporting quality, rather than treating these constructs as independent determinants. By integrating digital governance, information systems, and public-sector financial reporting perspectives, this study provides a more comprehensive explanation of why similar digital governance initiatives may produce different financial reporting outcomes across local government institutions despite operating under the same digital governance system.

Against this background, the present study seeks to analyze the influence of SIPD implementation on local government financial reporting quality while simultaneously examining the moderating role of information technology utilization in this relationship. Specifically, this study addresses three research questions:

- (1) to what extent does SIPD implementation influence the quality of local government financial reporting? and
- (2) To what extent does information technology utilization influence the quality of local government financial reporting?
- (3) how does information technology utilization moderate the relationship between SIPD implementation and financial reporting quality within the broader context of public sector digital governance?

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theoretical Foundation

This study is grounded primarily in the Technology–Organization–Environment (TOE) Framework and supported by the DeLone and McLean Information Systems Success Model to explain how SIPD implementation influences financial reporting quality and how information technology utilization conditions this relationship. Developed by Louis G. Tornatzky and Mitchell Fleischer (1990), the TOE framework explains that the effectiveness of technological systems depends on the interaction among technological, organizational, and environmental dimensions. The technological dimension concerns the characteristics and

availability of technological systems, the organizational dimension refers to internal resources, capabilities, and readiness, while the environmental dimension concerns institutional regulations and external pressures shaping technology implementation (Tornatzky & Fleischer, 1990; Baker, 2012). Within local government financial administration, SIPD represents the technological context because it functions as an integrated digital platform for regional financial management, whereas information technology utilization reflects the organizational context that determines whether the system can be effectively embedded into routine financial administration. The regulatory obligation for local governments to implement standardized digital financial systems simultaneously reflects the environmental context that shapes institutional compliance and digital governance practices.

Supporting this perspective, the DeLone and McLean Information Systems Success Model explains that information systems generate organizational benefits through effective system use and information quality (DeLone & McLean, 1992, 2003). According to this model, the existence of a technological system alone does not automatically improve organizational outcomes unless users actively engage with the system and effectively integrate it into organizational activities. In the context of this study, SIPD represents the information system, information technology utilization reflects system use, and financial reporting quality corresponds to information quality outcomes. Consequently, the quality of financial reporting is expected to improve when SIPD is not only implemented formally but also utilized effectively within local government financial administration. The integration of these theories provides a stronger explanation regarding why SIPD implementation may produce varying outcomes across governmental institutions and why information technology utilization may strengthen or weaken the influence of SIPD on financial reporting quality.

SIPD Implementation and Financial Reporting Quality

Digital governance has increasingly become an important mechanism for strengthening public sector accountability because government institutions are required to produce financial information that is transparent, timely, reliable, and accountable. Rather than merely functioning as administrative support tools, digital governance systems increasingly serve as institutional infrastructures that improve transparency, financial traceability, and accountability mechanisms in public administration (Bu, 2025; Chen & Cao, 2025). Within public financial management, financial reporting quality refers to the extent to which financial information demonstrates relevance, reliability, comparability, understandability, and

timeliness for decision-making and accountability purposes. As financial administration becomes increasingly digitalized, the quality of financial reporting is progressively shaped by the effectiveness of information systems capable of improving data integration and reducing reporting fragmentation (Ibrahim et al., 2025).

In Indonesia, the implementation of the *Sistem Informasi Pemerintahan Daerah* (SIPD) represents a major digital governance initiative aimed at integrating regional planning, budgeting, treasury administration, and financial reporting into a unified digital platform. The implementation of SIPD is expected to reduce fragmented reporting practices, strengthen financial coordination among government units, and improve accountability in local government financial management (Razak & Anriani, 2024). Empirical evidence generally supports the positive role of SIPD in regional financial administration. Bernika et al. (2023) show that SIPD improves expenditure administration through better documentation and financial transaction management. Similarly, Mendriadi et al. (2024) report that SIPD supports financial administration effectiveness in Buleleng Regency through more systematic reporting and financial coordination. Nangoy et al. (2025) further demonstrate that SIPD contributes positively to regional financial management in North Sulawesi Province, particularly in strengthening financial recording and reporting consistency.

Nevertheless, prior findings simultaneously suggest that SIPD implementation does not necessarily generate uniform outcomes across local governments. Variations in bureaucratic readiness, technological capability, infrastructure stability, and organizational adaptation may shape the extent to which SIPD contributes to better financial reporting quality. Umaira and Setyaningrum (2025) show that user acceptance and technological innovativeness significantly influence the effectiveness of SIPD implementation, implying that digital systems may not produce expected benefits when users experience technological barriers or insufficient readiness. In broader digital governance literature, digitally integrated systems improve reporting quality because they strengthen internal control, reduce information asymmetry, and facilitate information verification processes (Chen et al., 2022; Shi & Zhang, 2025; Zong & Wang, 2025). Therefore, SIPD implementation is expected to positively influence financial reporting quality because integrated financial systems strengthen data consistency, reduce administrative inefficiencies, and improve institutional transparency.

H1: The implementation of SIPD positively influences the quality of local government financial reporting.

Information Technology Utilization and Financial Reporting Quality

Information technology utilization refers to the extent to which government institutions and employees effectively employ technological systems to support administrative processes, financial reporting, and organizational decision-making. Unlike technology adoption, which focuses on the formal introduction of technological systems, information technology utilization emphasizes the effectiveness, consistency, and intensity with which technology is embedded into routine organizational activities. From the perspective of the Technology–Organization–Environment (TOE) framework, organizational capability plays a central role in determining whether technological systems generate meaningful organizational outcomes because the benefits of technology depend on institutional readiness, human capability, and effective system use rather than technology availability alone (Nasiri et al., 2022).

Recent studies consistently demonstrate that effective information technology utilization enhances organizational governance and financial reporting outcomes by improving data integration, internal control, and decision-making quality. Purnamasari et al. (2025) report that technological infrastructure and digital innovation adoption significantly improve public service performance and institutional effectiveness within Indonesian public organizations. Likewise, Liu et al. (2024) argue that financial digitalization strengthens internal governance and organizational trust by improving information transparency and reinforcing governance mechanisms, suggesting that effective utilization of digital technologies contributes to higher-quality organizational information. From a broader governance perspective, Ullah et al. (2023) contend that governance supported by digital technologies enhances institutional effectiveness because technology-driven governance improves coordination, accountability, and organizational performance. Similarly, Wei et al. (2023) demonstrate that financial innovation, supported by government auditing and digital governance practices, contributes to higher organizational quality by strengthening monitoring mechanisms and improving financial management processes.

Within financial reporting contexts, information technology utilization improves information quality by reducing reporting errors, accelerating information processing, strengthening verification procedures, and facilitating more consistent reporting practices. Empirical evidence indicates that organizations integrating digital technologies into accounting and reporting activities produce more reliable financial information and more effective governance outcomes (Chen et al., 2022). Furthermore, Xu and Hu (2023) show that digital institutional initiatives significantly improve financial reporting quality by

strengthening information transparency, reporting consistency, and institutional accountability. These findings are reinforced by Zhang and Ma (2025), who argue that digital finance governance enhances internal control quality, while Shi and Zhang (2025) demonstrate that audit digitalization reduces internal control weaknesses and improves the reliability of financial information.

Nevertheless, the positive contribution of information technology utilization to financial reporting quality is not automatic. Organizations experiencing inadequate digital competence, technological constraints, or insufficient organizational readiness may fail to realize the full benefits of digital systems because weak technological engagement reduces reporting consistency, limits information verification, and weakens governance effectiveness. Consequently, stronger information technology utilization is expected to improve local government financial reporting quality by enabling more transparent, accurate, reliable, and accountable financial administration through the effective integration of digital technologies into organizational routines.

H2: Information technology utilization positively influences the quality of local government financial reporting.

The Moderating Role of Information Technology Utilization in the Relationship Between SIPD Implementation and Financial Reporting Quality

Although SIPD implementation is expected to improve financial reporting quality, its effectiveness may vary depending on the extent to which information technology is utilized within local government institutions. The TOE framework suggests that organizational outcomes of technological systems are not determined solely by system availability but are strongly influenced by organizational capability in utilizing technological resources effectively (Tornatzky & Fleischer, 1990). This implies that SIPD implementation may improve financial reporting quality more substantially when local governments possess stronger technological competence and greater technological engagement in routine financial administration.

Research on digital governance consistently suggests that digital systems generate stronger institutional outcomes when supported by effective organizational practices and technological readiness. Bu (2025) demonstrates that digital government construction enhances governance capacity through stronger financial information transparency, while Jin

and Wang (2025) argue that digital budget supervision governance strengthens fiscal accountability through digitally integrated monitoring systems. Likewise, Meng et al. (2025) explain that digital government development improves institutional transformation through integrated data governance and administrative reform. These findings indicate that digital systems become more effective when organizations possess adequate capability to utilize technological infrastructures efficiently.

The moderating role of information technology utilization is further supported by digital transformation literature emphasizing that organizational benefits from digital systems depend on active technological engagement rather than formal implementation alone. Li et al. (2022) argue that digital adaptive governance strengthens organizational outcomes because institutions capable of effectively utilizing technology are better positioned to transform digital infrastructures into operational improvements. Within SIPD implementation, stronger information technology utilization may reinforce the positive influence of SIPD on financial reporting quality because government employees can process financial information more consistently, strengthen reporting verification, reduce procedural errors, and improve reporting transparency. Conversely, weak technology utilization may limit the effectiveness of SIPD because system features remain underutilized and reporting processes become inconsistent.

By integrating digital governance literature with SIPD implementation studies, this study proposes that information technology utilization functions as a moderating mechanism explaining why SIPD implementation may generate varying reporting outcomes across local governments. Thus, the effectiveness of SIPD in improving financial reporting quality is expected to become stronger under conditions of higher information technology utilization.

H3: Information technology utilization moderates the relationship between SIPD implementation and local government financial reporting quality, such that the positive influence of SIPD implementation on financial reporting quality becomes stronger at higher levels of information technology utilization.

Conceptual Framework

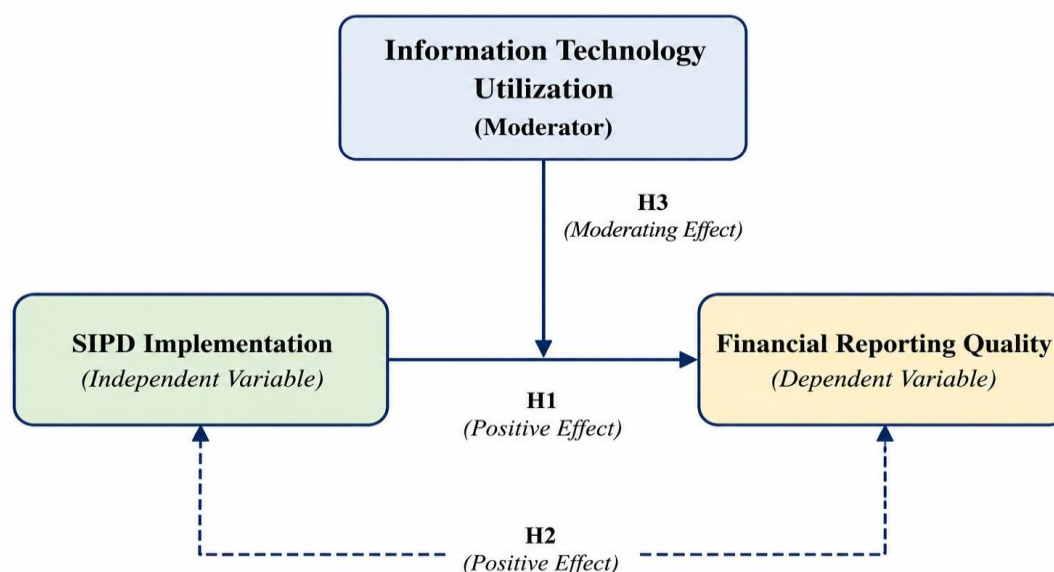


Figure 1. Conceptual Framework of the Study

This study employed a quantitative explanatory research design to examine the causal relationships among variables through hypothesis testing. Explanatory research is appropriate when a study aims to explain causal relationships among variables and determine the extent to which one variable influences another through empirical investigation (Sugiyono, 2019). In this study, the research model investigates the influence of Sistem Informasi Pemerintahan Daerah (SIPD) implementation on financial reporting quality, while simultaneously examining the moderating role of information technology utilization in strengthening or weakening this relationship. This design is theoretically aligned with the Technology–Organization–Environment (TOE) Framework, which suggests that the effectiveness of technological systems depends not only on technological implementation but also on organizational capability and institutional readiness in utilizing technology effectively (Tornatzky & Fleischer, 1990; Baker, 2012).

A cross-sectional survey approach was adopted in this study, whereby data were collected at a single point in time through structured questionnaires distributed to respondents working in local government institutions. Since this study focuses on respondents' perceptions, experiences, and institutional practices regarding SIPD implementation, information technology utilization, and financial reporting quality, primary data were considered the most suitable source for capturing direct institutional experiences and

organizational realities (Sekaran & Bougie, 2016). Furthermore, a quantitative survey approach is widely used in digital governance and public financial administration studies because it enables systematic testing of causal relationships among variables and facilitates statistical examination of moderating effects (Hair et al., 2019).

Population, Sample, and Sampling Technique

Population refers to a generalized area consisting of subjects or objects possessing specific characteristics determined by researchers for investigation and subsequent inference (Sugiyono, 2019). The population of this study consisted of employees working within Organisasi Perangkat Daerah (OPD) involved in financial management, budgeting, administration, and financial reporting processes. These employees were considered appropriate because SIPD implementation and local government financial reporting activities are directly associated with institutional financial management and administrative responsibilities.

The sampling technique employed in this study was purposive sampling, which refers to a non-probability sampling approach in which respondents are selected according to specific research considerations relevant to the objectives of the study (Sugiyono, 2019). This approach was deemed appropriate because not all government employees possess sufficient experience or authority related to SIPD implementation and financial reporting activities. Therefore, respondents were selected based on their institutional positions and involvement in financial governance processes.

The characteristics of respondents included:

1. Heads of Regional Government Organizations (Echelon II);
2. Heads of Divisions or Departments (Echelon III) directly involved in financial administration and reporting processes.

These respondents were selected because they possess strategic responsibilities in planning, supervising, implementing, and evaluating financial management procedures within local government institutions. Their institutional roles enable them to provide informed assessments regarding the implementation of SIPD, the utilization of information technology, and the quality of local government financial reporting.

Data Collection Technique and Instrument Development

This study utilized primary data, consisting of respondents' opinions, perceptions,

experiences, and institutional evaluations related to SIPD implementation, information technology utilization, and financial reporting quality. Primary data were collected using a structured questionnaire (survey instrument) distributed to respondents in selected OPDs. A questionnaire-based approach was considered suitable because it facilitates standardized data collection regarding institutional experiences, organizational practices, and perceptions concerning digital governance systems within public sector settings (Sekaran & Bougie, 2016).

The questionnaire employed a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree, to measure respondents' perceptions regarding each construct. Likert scales are commonly used in public administration and information systems research because they effectively capture respondents' attitudes, perceptions, and behavioral tendencies in measurable forms (Hair et al., 2019).

SIPD Implementation (Independent Variable)

The independent variable in this study is SIPD implementation, referring to the extent to which the regional government information system is implemented and integrated into planning, budgeting, treasury administration, expenditure management, and financial reporting activities. SIPD is conceptualized as an integrated web-based information system connecting regional development information, regional financial information, and other government administrative information within the national framework of *Sistem Pemerintahan Berbasis Elektronik* (SPBE) aimed at strengthening good governance practices (Wulandari & Yulianti, 2023). Since SIPD serves as an integrated digital governance mechanism for local government administration, its effectiveness is expected to improve institutional transparency, administrative efficiency, and reporting consistency.

The measurement instrument for SIPD implementation consisted of 12 statement items, assessed using a five-point Likert scale. The indicators focused on system accessibility, integration effectiveness, reporting coordination, administrative efficiency, information consistency, and system usefulness in supporting financial administration processes.

Financial Reporting Quality (Dependent Variable)

The dependent variable in this study is financial reporting quality, defined as the extent to which financial information complies with government accounting standards and provides relevant, reliable, understandable, comparable, and timely information for accountability and

decision-making purposes. Within local government contexts, financial reporting quality reflects institutional accountability in managing public resources and demonstrates the extent to which financial information accurately represents governmental financial performance.

The measurement instrument for financial reporting quality was adapted from Government Regulation Number 71 of 2010 concerning Government Accounting Standards (*Standar Akuntansi Pemerintahan/SAP*), which emphasizes relevance, reliability, comparability, and understandability as central dimensions of high-quality financial reporting (Wulandari & Yulianti, 2023). This variable was measured using eight statement items, assessed through a five-point Likert scale.

Information Technology Utilization (Moderating Variable)

The moderating variable in this study is information technology utilization, referring to the degree to which technological systems and digital infrastructures are effectively used to support financial administration, information processing, reporting, and decision-making activities. Information technology utilization encompasses activities related to data collection, processing, storage, dissemination, and integration supported by interconnected digital systems designed to improve organizational efficiency and effectiveness (Wilkinson et al., 2020).

In the context of SIPD implementation, information technology utilization reflects organizational capability in integrating technological systems into routine financial administration practices. Stronger technological utilization may facilitate better system engagement, improve data verification, reduce procedural errors, and strengthen reporting consistency. The instrument used to measure information technology utilization consisted of six statement items, assessed using a five-point Likert scale.

Data Analysis Technique

Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to provide a general overview of respondents' characteristics and the distribution of research variables. Descriptive statistics included mean, standard deviation, minimum value, and maximum value, which were used to summarize sample tendencies and identify response patterns prior to inferential statistical analysis (Ghozali, 2018).

Data Quality Testing

To ensure the appropriateness and consistency of measurement instruments, this study conducted validity and reliability testing. Validity testing was conducted to determine whether questionnaire items accurately measured the intended constructs, while reliability testing was performed to examine the internal consistency of measurement items (Ghozali, 2018). Instrument reliability was evaluated using Cronbach's Alpha coefficient, where values exceeding acceptable thresholds indicated satisfactory internal consistency.

Classical Assumption Testing

Before conducting regression analysis, several classical assumption tests were performed to ensure the suitability of the data for statistical modeling (Ghozali, 2018). These tests included:

1. Normality Test, using the One-Sample Kolmogorov–Smirnov Test, histogram distribution, and Normal Probability Plot (P–P Plot) to determine whether residual data followed a normal distribution;
2. Heteroscedasticity Test, using a scatterplot graph to determine whether residual variance remained constant across observations;
3. Multicollinearity Test, using Tolerance and Variance Inflation Factor (VIF) values to assess correlations among predictor variables and ensure the absence of multicollinearity.

Moderated Regression Analysis (MRA)

To test the proposed hypotheses, this study employed Moderated Regression Analysis (MRA). MRA is a specialized form of multiple linear regression used to simultaneously examine direct effects and interaction effects within a conceptual model (Hayes, 2018). This analytical approach was considered appropriate because the present study investigates (1) the direct influence of SIPD implementation on financial reporting quality, (2) the direct influence of information technology utilization on financial reporting quality, and (3) the moderating role of information technology utilization in strengthening or weakening the relationship between SIPD implementation and financial reporting quality.

The use of MRA is theoretically consistent with the TOE framework, which suggests that organizational outcomes of technological systems are influenced not merely by

technology implementation but also by institutional capability in utilizing technological resources effectively (Tornatzky & Fleischer, 1990). In this study, SIPD implementation represents the technological dimension, whereas information technology utilization reflects organizational capability that may determine the effectiveness of SIPD in improving financial reporting quality.

Accordingly, the moderated regression equation used in this study is expressed as follows:

$$Y = \alpha + \beta_1 X + \beta_2 Z + \beta_3 (X \times Z) + \varepsilon$$

Where:

- Y = Financial Reporting Quality
- X = SIPD Implementation
- Z = Information Technology Utilization
- $X \times Z$ = Interaction effect between SIPD implementation and information technology utilization
- α = Constant
- β_1 = Regression coefficient of SIPD implementation
- β_2 = Regression coefficient of information technology utilization
- β_3 = Moderating coefficient
- ε = Error term

The regression coefficients were interpreted as follows:

- β_1 was used to test H1, namely whether SIPD implementation positively influences financial reporting quality;
- β_2 was used to test H2, namely whether information technology utilization positively influences financial reporting quality;
- β_3 was used to test H3, namely whether information technology utilization moderates the relationship between SIPD implementation and financial reporting quality.

A statistically significant interaction coefficient (β_3) indicates that stronger information technology utilization enhances the positive effect of SIPD implementation on financial reporting quality.

RESULTS AND DISCUSSION

The Influence of SIPD Implementation on Financial Reporting Quality

This study examined the direct influence of SIPD implementation (X) on financial

reporting quality (Y) through regression analysis. Prior to inferential testing, descriptive statistical analysis was conducted to provide an overview of respondents' perceptions regarding both variables.

Descriptive Statistics

Table 1
Descriptive Statistics of SIPD Implementation and Financial Reporting Quality

Variable	N	Minimum	Maximum	Mean	Std. Deviation
SIPD Implementation (X)	179	29	60	46.18	8.32
Financial Reporting Quality (Y)	179	17	40	31.63	6.20

Source: *Processed Primary Data (2026)*

Table 1 shows that respondents generally reported favorable perceptions regarding both SIPD implementation and financial reporting quality. SIPD implementation recorded a mean score of 46.18 (SD = 8.32), indicating that respondents perceived SIPD to have been adequately integrated into financial administration, budgeting, reporting coordination, and information management processes. Likewise, financial reporting quality demonstrated a mean score of 31.63 (SD = 6.20), suggesting that respondents generally perceived local government financial reports as relatively reliable, understandable, relevant, and timely. These findings provide preliminary evidence that digital financial administration through SIPD had been positively perceived within local government institutions.

Classical Assumption Testing

Prior to regression analysis, classical assumption testing was conducted to ensure the suitability of the regression model.

Normality Test

The normality assumption was tested using the Kolmogorov–Smirnov test and supported by the Normal Probability Plot (P–P Plot).

Table 2
Normality Test Results

Indicator	Value
Kolmogorov–Smirnov Statistic	0.073
Asymp. Sig. (2-tailed)	0.200

Source: *Processed Primary Data (2026)*

Table 2 indicates that the regression residuals achieved an Asymp. Sig. value of 0.200,

exceeding the significance threshold of 0.05, indicating that the residuals were normally distributed. Therefore, the regression model met the normality assumption.

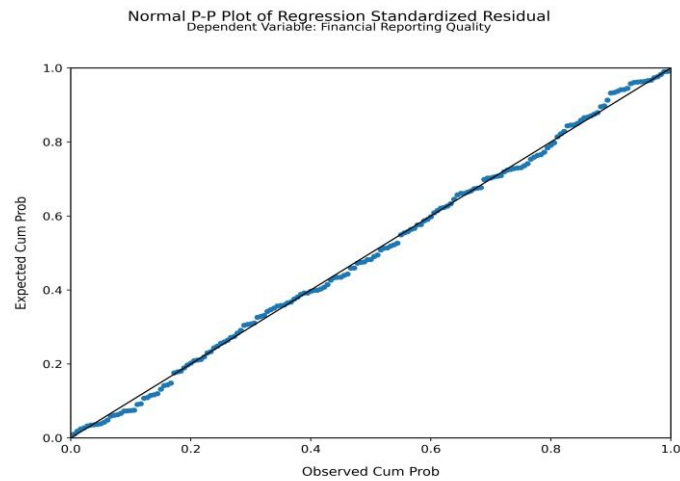


Figure 2. Normal P–P Plot of Regression Standardized Residual

The P–P Plot further supports the normality assumption, as the residual points were distributed closely around the diagonal line without substantial deviation, indicating acceptable residual normality.

Multicollinearity Test

Multicollinearity testing was conducted using Tolerance and Variance Inflation Factor (VIF) values.

Table 3
Multicollinearity Test Results

Variable	Tolerance	VIF
SIPD Implementation (X)	0.963	1.039

Source: *Processed Primary Data (2026)*

Table 3 demonstrates that the Tolerance value exceeded 0.10 and the VIF value remained below 10, indicating the absence of multicollinearity problems within the regression model.

Regression Results of SIPD Implementation on Financial Reporting Quality

Regression analysis was conducted to determine whether SIPD implementation significantly influences financial reporting quality.

Table 4
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.667	0.445	0.441	4.628

Source: *Processed Primary Data (2026)*

Table 4 indicates an R value of 0.667, suggesting a moderately strong positive relationship between SIPD implementation and financial reporting quality. The R Square value of 0.445 indicates that approximately 44.5% of the variance in financial reporting quality was explained by SIPD implementation, while the remaining 55.5% may be associated with other organizational, technological, and institutional factors beyond the scope of this study.

ANOVA Test

Table 5
ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1374.22	1	1374.22	64.187	.000
Residual	1712.41	177	9.67	—	—
Total	3086.63	178	—	—	—

Source: *Processed Primary Data (2026)*

The ANOVA results demonstrate that the regression model achieved an F-statistic of 64.187 ($p < .001$), indicating that SIPD implementation significantly contributed to explaining variations in financial reporting quality. Since the significance value was below **0.05**, the regression model was statistically acceptable.

Coefficients Test

Table 6
Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
Constant	8.742	2.186	—	3.998	.000
SIPD Implementation (X)	0.496	0.062	0.667	8.012	.000

Table 6 demonstrates that SIPD implementation had a positive and statistically significant influence on financial reporting quality ($\beta = 0.667$, $t = 8.012$, $p < .001$). Since the significance value was below 0.05, H1 was accepted, indicating that stronger SIPD implementation was associated with higher levels of financial reporting quality.

The regression coefficient ($B = 0.496$) indicates that every one-unit increase in SIPD implementation was associated with an improvement in financial reporting quality. This result suggests that stronger SIPD implementation contributes not only to better financial administration but also to improved institutional coordination, greater information consistency, and more integrated financial management processes across regional government organizations.

Within the Indonesian local government context, SIPD functions as an integrated digital governance platform that links planning, budgeting, treasury administration, accounting, and financial reporting into a unified information system. Consequently, effective SIPD implementation enables Organizational Units (OPD) to reduce data fragmentation, minimize manual reconciliation, improve information sharing, and standardize financial reporting procedures across government agencies. These institutional characteristics help explain why respondents perceived stronger SIPD implementation to be associated with higher financial reporting quality.

Based on respondents' perceptions, SIPD was positively evaluated particularly regarding content suitability, information accuracy, accessibility, ease of use, and timeliness, suggesting that the system functioned as an effective digital governance mechanism supporting financial management processes.

The present findings are consistent with Bernika et al. (2023), who found that SIPD improved expenditure administration through more systematic documentation and financial transaction management. Similarly, Mendriadi et al. (2024) reported that SIPD enhanced financial administration effectiveness by improving reporting coordination within local government institutions, while Nangoy et al. (2025) demonstrated that SIPD strengthened financial recording consistency and accountability in provincial government financial management. Razak and Anriani (2024) likewise concluded that SIPD promoted greater integration of regional financial administration through more coordinated reporting and budgeting processes. Collectively, these studies support the argument that integrated digital government systems contribute to higher financial reporting quality by improving administrative coordination, reducing reporting fragmentation, and strengthening institutional accountability.

However, the relatively strong relationship identified in the present study may also reflect differences in research context. Previous studies generally examined SIPD implementation within individual districts, provinces, or specific government agencies, where the primary emphasis was placed on operational or administrative effectiveness. In contrast, this study collected data from managerial personnel across multiple regional government organizations responsible for planning, budgeting, financial administration, and financial reporting. Consequently, respondents evaluated SIPD not only in terms of operational efficiency but also from broader organizational perspectives, including interdepartmental coordination, financial integration, transparency, and accountability. These contextual differences may partially explain why SIPD exhibited a relatively strong positive influence on financial reporting quality in the

present study.

From a theoretical perspective, these findings reinforce the Technology–Organization–Environment (TOE) framework, which argues that technological innovations create organizational value only when effectively integrated into organizational processes and supported by institutional capability. The findings also support recent digital governance research suggesting that integrated digital systems improve transparency, strengthen internal control mechanisms, reduce information asymmetry, and enhance financial information quality when embedded within routine organizational practices (Bu, 2025; Chen et al., 2022; Ibrahim et al., 2025; Zong & Wang, 2025). Nevertheless, SIPD implementation should not be interpreted as a standalone determinant of financial reporting quality. As suggested by Umaira and Setyaningrum (2025), the effectiveness of SIPD remains contingent upon organizational readiness, technological competence, and users' capability to utilize digital systems effectively.

The Influence of Information Technology Utilization on Financial Reporting Quality

To answer the second research question, namely “To what extent does information technology utilization influence the quality of local government financial reporting?”, regression analysis was conducted to examine the direct influence of information technology utilization (Z) on financial reporting quality (Y). Prior to inferential testing, descriptive statistical analysis was conducted to provide an overview of respondents’ perceptions regarding both variables.

Descriptive Statistics

Table 7
Descriptive Statistics of Information Technology Utilization and Financial Reporting Quality Variable

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Information Technology Utilization (Z)	179	14	30	23.06	3.90
Financial Reporting Quality (Y)	179	17	40	31.63	6.20

Source: *Processed Primary Data (2026)*

Table 7 indicates that respondents generally reported favorable perceptions toward both information technology utilization and financial reporting quality. Information technology utilization recorded a mean score of 23.06 (SD = 3.90), suggesting that respondents perceived technological systems to have been adequately utilized in supporting financial administration, data processing, reporting coordination, and decision-making activities. Likewise, financial

reporting quality achieved a mean score of 31.63 (SD = 6.20), indicating that respondents generally perceived financial reports to be relatively reliable, understandable, relevant, and timely.

Classical Assumption Testing

Before regression analysis was conducted, classical assumption testing was performed to ensure the suitability of the regression model.

Normality Test

The normality assumption was tested using the Kolmogorov–Smirnov test and supported by the Normal Probability Plot (P–P Plot).

Table 8
Normality Test Results

Indicator	Value
Kolmogorov–Smirnov Statistic	0.071
Asymp. Sig. (2-tailed)	0.200

Source: *Processed Primary Data (2026)*

Table 8 indicates that the residuals achieved an Asymp. Sig. value of 0.200, exceeding the significance threshold of 0.05, indicating that the residual data were normally distributed.

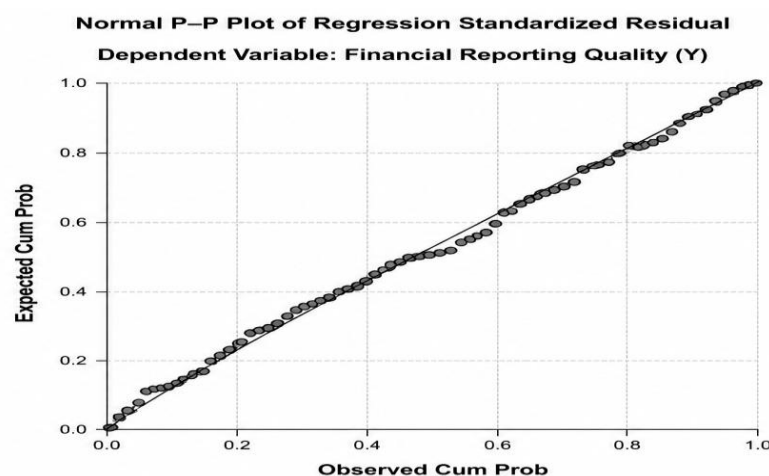


Figure 3. Normal P–P Plot of Regression Standardized Residual

The P–P Plot further supports the normality assumption, as residual points were distributed closely around the diagonal line without substantial deviation, indicating acceptable residual normality.

Multicollinearity Test

Multicollinearity testing was conducted using Tolerance and Variance Inflation Factor (VIF) values.

Table 9
Multicollinearity Test Results

Variable	Tolerance	VIF
Information Technology Utilization (Z)	0.963	1.039

Source: *Processed Primary Data (2026)*

Table 9 demonstrates that the Tolerance value exceeded 0.10 and the VIF value remained below 10, indicating the absence of multicollinearity problems within the regression model.

Regression Results of Information Technology Utilization on Financial Reporting Quality

Regression analysis was conducted to determine whether information technology utilization significantly influences financial reporting quality.

Model Summary

Table 10
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.592	0.350	0.346	5.016

Source: *Processed Primary Data (2026)*

Table 10 indicates an R value of 0.592, suggesting a moderately strong positive relationship between information technology utilization and financial reporting quality. The R Square value of 0.350 indicates that approximately 35.0% of the variance in financial reporting quality was explained by information technology utilization, while the remaining 65.0% may be associated with other institutional and organizational factors beyond the scope of this study.

ANOVA Test

Table 11
ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1080.74	1	1080.74	42.954	.000
Residual	2005.89	177	11.33	—	—
Total	3086.63	178	—	—	—

Source: *Processed Primary Data (2026)*

The ANOVA results demonstrate that the regression model achieved an F-statistic of 42.954 ($p < .001$), indicating that information technology utilization significantly contributed to explaining variations in financial reporting quality. Since the significance value was below 0.05, the regression model was statistically acceptable.

Coefficients Test

Table 12
Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
Constant	10.834	2.073	—	5.226	.000
Information Technology Utilization (Z)	0.902	0.138	0.592	6.554	.000

Source: *Processed Primary Data (2026)*

Table 12 demonstrates that information technology utilization had a positive and statistically significant influence on financial reporting quality ($\beta = 0.592$, $t = 6.554$, $p < .001$). Since the significance value was below 0.05, H2 was accepted, indicating that stronger information technology utilization was associated with higher levels of financial reporting quality.

The regression coefficient ($B = 0.902$) indicates that every one-unit increase in information technology utilization was associated with an improvement in financial reporting quality. This finding suggests that the effective utilization of information technology contributes not only to faster data processing but also to improving reporting accuracy, strengthening information accessibility, enhancing interdepartmental coordination, and supporting more evidence-based decision-making within local government institutions.

Within the context of SIPD implementation, these findings indicate that the benefits of digital governance depend not merely on the existence of an integrated information system but also on the extent to which government employees actively utilize technological resources in their routine financial management activities. When users consistently employ digital technologies to process, verify, and exchange financial information, the reporting process becomes more standardized, transparent, and reliable. Conversely, the availability of technological infrastructure alone is unlikely to improve financial reporting quality unless it is accompanied by effective organizational utilization and user engagement.

Respondents generally perceived information technology utilization positively, particularly regarding technological support for information processing, financial coordination, reporting efficiency, and organizational decision-making. Overall, the findings

indicate that stronger utilization of technological systems contributed to more reliable, transparent, and accountable financial reporting practices within local government institutions.

The present findings are consistent with Purnamasari et al. (2025), who reported that technological infrastructure and digital innovation adoption improved public service performance and institutional effectiveness. Similarly, Chen et al. (2022) and Ibrahim et al. (2025) demonstrated that digital transformation and technological integration enhance accounting information quality by improving data accuracy, reporting efficiency, and organizational control mechanisms. The findings are also consistent with Liu et al. (2024), who argued that financial digitalization strengthens internal governance through greater information transparency and improved organizational coordination. Likewise, Xu and Hu (2023) found that digital institutional initiatives contribute to higher financial reporting quality by enhancing reporting consistency, accountability, and information reliability. Furthermore, Ullah et al. (2023) emphasized that governance supported by digital technologies improves institutional effectiveness because technology-driven governance strengthens coordination and accountability, while Wei et al. (2023) demonstrated that digital innovation and government oversight improve organizational quality through stronger monitoring mechanisms.

Nevertheless, the magnitude of the relationship observed in the present study may differ from previous studies because of differences in institutional context. Much of the existing literature has examined digital transformation within corporate organizations, financial institutions, or broader digital governance initiatives, whereas the present study focuses specifically on local government institutions implementing SIPD as a mandatory public-sector financial management system. Consequently, information technology utilization in this study reflects not only the use of digital tools but also the organizational capability of government employees to integrate technology into budgeting, treasury administration, accounting, and financial reporting processes. This distinctive public-sector context may explain why information technology utilization demonstrated a substantial positive influence on financial reporting quality.

From a theoretical perspective, these findings reinforce the Technology–Organization–Environment (TOE) framework, which emphasizes that organizational benefits derived from technological systems depend largely on organizational capability rather than technology

availability alone. The findings also support the DeLone and McLean Information Systems Success Model, which proposes that organizational benefits arise when information systems are actively utilized to improve information quality and decision-making. Accordingly, effective utilization of information technology represents a critical organizational capability that enables SIPD to function as an effective digital governance mechanism for improving financial reporting quality. However, as suggested by Yang et al. (2021), the positive influence of technology utilization should be interpreted cautiously because organizational readiness, digital competence, and user capability remain essential prerequisites for realizing the full benefits of digital transformation.

The Moderating Role of Information Technology Utilization on the Relationship Between SIPD Implementation and Financial Reporting Quality

To answer the third research question, namely “How does information technology utilization moderate the relationship between SIPD implementation and financial reporting quality within the broader context of public sector digital governance?”, this study employed Moderated Regression Analysis (MRA) to examine whether information technology utilization strengthens or weakens the relationship between SIPD implementation and financial reporting quality. Specifically, an interaction term (SIPD Implementation × Information Technology Utilization) was incorporated into the regression model to determine whether the effectiveness of SIPD implementation varies depending on the extent to which technological resources are utilized within local government institutions.

Descriptive Statistics

Before testing the moderating effect, descriptive statistical analysis was conducted to provide an overview of respondents’ perceptions regarding SIPD implementation, information technology utilization, and financial reporting quality.

Table 13
Results of the Kolmogorov–Smirnov Normality Test

Indicator	Value
Kolmogorov–Smirnov Statistic	0.071
Asymp. Sig. (2-tailed)	0.200

Source: *Processed Primary Data (2026)*

Table 13 indicates that respondents generally demonstrated favorable perceptions toward all research variables. SIPD implementation and information technology utilization

achieved relatively high mean scores, suggesting that digital systems had been adequately implemented and utilized to support regional financial administration. Likewise, financial reporting quality demonstrated favorable perceptions, indicating that respondents generally viewed local government financial reports as relatively reliable, relevant, understandable, and timely.

Classical Assumption Testing

Prior to hypothesis testing, classical assumption tests were conducted to ensure the suitability of the moderated regression model.

Normality Test

The normality assumption was tested using the Kolmogorov–Smirnov test and supported by the Normal Probability Plot (P–P Plot).

Table 14
Normality Test Results

Indicator	Value
Kolmogorov–Smirnov Statistic	0.071
Asymp. Sig. (2-tailed)	0.200

Source: *Processed Primary Data (2026)*

Table 14 indicates that the residuals achieved an Asymp. Sig. value of 0.200, exceeding the significance threshold of 0.05, indicating that the residual data were normally distributed and suitable for regression analysis.

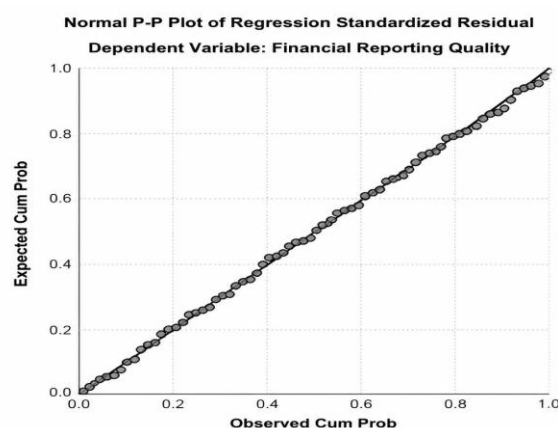


Figure 4. Normal P–P Plot of Regression Standardized Residual

The P–P Plot further supports the normality assumption, as residual points were distributed closely around the diagonal line without substantial deviation, indicating

acceptable residual normality.

Multicollinearity Test

Multicollinearity testing was conducted using Tolerance and Variance Inflation Factor (VIF) values.

Table 15
Multicollinearity Test Results

Variable	Tolerance	VIF
SIPD Implementation (X)	0.782	1.279
Information Technology Utilization (Z)	0.775	1.290
Interaction ($X \times Z$)	0.721	1.387

Source: *Processed Primary Data (2026)*

Table 15 shows that all variables demonstrated Tolerance values above 0.10 and VIF values below 10, indicating the absence of multicollinearity problems within the moderated regression model.

Moderated Regression Analysis (MRA)

To determine whether information technology utilization moderates the relationship between SIPD implementation and financial reporting quality, Moderated Regression Analysis (MRA) was performed by including an interaction term ($X \times Z$) in the regression model.

Model Summary

Table 16
Model Summary of Moderated Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.742	0.551	0.543	4.013

Source: *Processed Primary Data (2026)*

Table 16 indicates an R value of 0.742, suggesting a strong positive relationship between the predictor variables and financial reporting quality. The R Square value of 0.551 indicates that approximately 55.1% of the variance in financial reporting quality was jointly explained by SIPD implementation, information technology utilization, and their interaction effect, while the remaining 44.9% may be influenced by other organizational and institutional factors beyond the present model.

ANOVA Test

Table 17
ANOVA Results of Moderated Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1701.81	3	567.27	35.221	.000
Residual	1384.82	175	7.91	—	—
Total	3086.63	178	—	—	—

Source: *Processed Primary Data (2026)*

Table 17 demonstrates that the moderated regression model achieved an F-statistic of 35.221 ($p < .001$), indicating that the regression model was statistically significant in explaining variations in financial reporting quality.

Coefficients Test

Table 18
Moderated Regression Coefficients

Variable	B	Std. Error	Beta	T	Sig.
Constant	5.764	2.311	—	2.494	.014
SIPD Implementation (X)	0.317	0.079	0.427	4.012	.000
Information Technology Utilization (Z)	0.486	0.153	0.289	3.176	.002
Interaction (X × Z)	0.028	0.009	0.241	3.094	.002

Source: *Processed Primary Data (2026)*

Table 18 demonstrates that the interaction term between SIPD implementation and information technology utilization ($X \times Z$) had a positive and statistically significant effect on financial reporting quality ($\beta = 0.241$, $t = 3.094$, $p = .002$). Since the significance value was below 0.05, H3 was accepted, indicating that information technology utilization significantly moderated the relationship between SIPD implementation and financial reporting quality.

The positive interaction coefficient indicates that the effectiveness of SIPD implementation became substantially stronger when government institutions demonstrated higher levels of information technology utilization. In other words, the findings suggest that the organizational benefits generated by SIPD were not determined solely by the implementation of the digital system itself but also by the extent to which government employees actively utilized technological resources in their routine financial management

activities. This result implies that information technology utilization functions as an enabling organizational capability that allows SIPD to operate more effectively in supporting financial reporting quality.

Within the Indonesian local government context, this finding reflects the practical reality that SIPD is implemented as an integrated financial management platform across planning, budgeting, treasury administration, accounting, and reporting functions. However, the existence of an integrated information system alone does not necessarily guarantee improvements in financial reporting quality. The effectiveness of SIPD depends on whether government employees consistently utilize digital technologies to process financial data, verify information, coordinate reporting activities across Organizational Units (OPD), and support evidence-based financial decision-making. Consequently, higher levels of information technology utilization strengthen the contribution of SIPD by improving reporting consistency, reducing administrative fragmentation, and facilitating more reliable financial information.

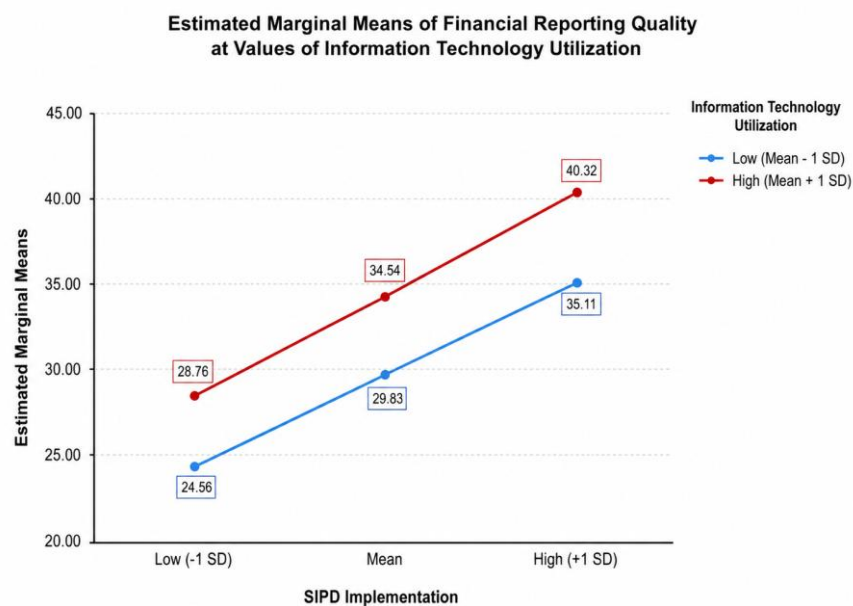


Figure 5. Moderating Effect of Information Technology Utilization on the Relationship Between SIPD Implementation and Financial Reporting Quality

Figure 5 illustrates that local governments with higher levels of information technology utilization demonstrated a stronger positive relationship between SIPD implementation and financial reporting quality compared with institutions exhibiting lower technological utilization. This finding indicates that effective technological engagement amplified the benefits of SIPD implementation by improving information consistency, reporting

integration, and administrative efficiency.

The moderating effect identified in this study extends previous research on SIPD implementation by demonstrating that organizational capability represents an important condition determining whether digital governance initiatives generate meaningful reporting outcomes. While earlier studies primarily examined the direct influence of SIPD implementation or digital transformation on financial administration, the present study shows that information technology utilization explains why comparable levels of SIPD implementation may produce different reporting outcomes across local government institutions. Local governments possessing stronger technological engagement appear better able to transform SIPD into an effective organizational resource for improving financial reporting quality than institutions where technology utilization remains relatively limited.

The present findings are consistent with Nasiri et al. (2022), who argued that digital maturity and digital intensity shape organizational performance during digital transformation. Likewise, Purnamasari et al. (2025) reported that technological infrastructure and digital innovation adoption strengthen institutional effectiveness within Indonesian public organizations. Yang et al. (2021) similarly emphasized that information technology governance conditions the effectiveness of digital systems by ensuring that technological resources are embedded into organizational routines rather than functioning merely as technical infrastructure. At a broader governance level, the findings also support Bu (2025) and Jin and Wang (2025), who concluded that digital governance systems improve institutional transparency and accountability when digital technologies are effectively integrated into public-sector administrative processes.

Nevertheless, the moderating effect observed in this study should also be interpreted in light of differences in institutional context. Previous studies frequently investigated digital transformation within corporate organizations, specific government agencies, or broader digital governance initiatives without explicitly examining the interaction between integrated financial management systems and organizational technology utilization. In contrast, the present study focuses specifically on Indonesian local governments implementing SIPD as a mandatory national financial management platform. Consequently, information technology utilization reflects not merely technological infrastructure but also the organizational capability of government employees to integrate digital systems into planning, budgeting, treasury administration, accounting, and financial reporting activities. These contextual

differences may explain why information technology utilization emerged as a significant strengthening mechanism rather than merely an independent predictor of financial reporting quality.

From a theoretical perspective, these findings provide strong support for the Technology–Organization–Environment (TOE) framework, particularly the proposition that organizational capability determines whether technological innovations generate organizational value. Rather than viewing SIPD implementation as an isolated technological intervention, the findings demonstrate that organizational capability in utilizing information technology represents the mechanism through which digital governance initiatives translate into higher-quality financial reporting. The results also reinforce the DeLone and McLean Information Systems Success Model by indicating that organizational benefits arise not simply from system implementation but from effective system utilization that improves information quality and decision-making. Nevertheless, as suggested by Umaira and Setyaningrum (2025), uneven organizational readiness, technological competence, and user capability may reduce the effectiveness of SIPD implementation despite the availability of advanced digital systems.

CONCLUSIONS AND SUGGESTIONS

Conclusions

This study examined the influence of SIPD implementation on local government financial reporting quality, while simultaneously investigating the role of information technology utilization as a moderating variable within the broader context of public sector digital governance. The findings demonstrate that SIPD implementation significantly and positively influenced financial reporting quality, indicating that stronger implementation of integrated regional government information systems contributed to more reliable, relevant, understandable, and timely financial reporting practices. This finding suggests that SIPD functioned not merely as an administrative platform but also as a digital governance mechanism capable of strengthening financial coordination, reporting consistency, and institutional accountability within local government organizations.

The study also found that information technology utilization significantly and positively influenced financial reporting quality. This finding indicates that the effectiveness of financial reporting was shaped not only by system availability but also by the extent to which technological resources were meaningfully utilized in organizational routines. Higher levels

of information technology utilization enabled more efficient data processing, improved reporting accuracy, and stronger coordination in financial administration processes. Thus, digital infrastructure alone may not be sufficient unless accompanied by effective technological engagement among government personnel responsible for financial reporting.

More importantly, the findings reveal that information technology utilization significantly moderated the relationship between SIPD implementation and financial reporting quality. Specifically, the positive influence of SIPD implementation became stronger when information technology utilization was higher. This finding provides a more integrated explanation regarding why digital governance systems may produce varying outcomes across institutions despite using similar technological platforms. In this regard, the effectiveness of SIPD implementation appears to depend not solely on system adoption but also on institutional capability to meaningfully utilize technological resources within day-to-day financial administration.

From a theoretical perspective, the findings extend the relevance of the Technology–Organization–Environment (TOE) framework by demonstrating that technological outcomes in public sector governance are shaped through the interaction between technological systems and organizational capability. Practically, the findings suggest that local governments seeking to improve financial reporting quality should prioritize not only SIPD implementation but also institutional investments in technological capability, digital literacy, and organizational readiness to ensure that digital governance systems can function optimally in supporting accountability and financial transparency.

Limitations and Suggestions

Despite providing important empirical evidence regarding digital governance and financial reporting quality, this study has several limitations. First, the cross-sectional research design captured respondents' perceptions at a single point in time and therefore could not examine how SIPD implementation and information technology utilization evolve as organizations gain greater digital experience and institutional maturity. Second, the analytical model was limited to SIPD implementation and information technology utilization, whereas other organizational factors—including human resource competence, internal control quality, leadership support, institutional readiness, and digital literacy—may also influence financial reporting quality. Third, the respondents were limited to managerial personnel within regional government organizations (OPD), which may restrict the generalizability of the findings to

other institutional actors involved in public financial management.

Future research is therefore encouraged to employ longitudinal or mixed-method designs to capture changes in digital governance implementation over time while incorporating additional organizational variables that may provide a more comprehensive explanation of financial reporting quality. Expanding the sample to include technical financial staff, auditors, and operational personnel would also offer broader institutional perspectives. From a practical standpoint, local governments should strengthen technological capability through continuous user training, improved digital competencies, and stronger organizational readiness to ensure that SIPD implementation is effectively translated into higher-quality financial reporting.

REFERENCES

- Abdulquadri, A., Mogaji, E., Kieu, T. A., & Nguyen, N. P. (2021). Digital transformation in financial services provision: A Nigerian perspective to the adoption of chatbot. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(2), 258–281. <https://doi.org/10.1108/JEC-06-2020-0126>
- Agyapong, D. (2021). Implications of digital economy for financial institutions in Ghana: An exploratory inquiry. *Transnational Corporations Review*, 13(1), 51–61. <https://doi.org/10.1080/19186444.2020.1787304>
- Amanda, J., Maryati, S., & Patmawati. (2025). The influence of digital transformation, internal control and earning management on tax avoidance. *Jurnal Akuntansi dan Auditing*, 22(1), 1–17. <https://doi.org/10.14710/jaa.22.1.1-17>
- Baker, J. (2012). The Technology–Organization–Environment Framework. In: Dwivedi, Y., Wade, M., Schneberger, S. (eds) *Information Systems Theory. Integrated Series in Information Systems*, vol 28. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-6108-2_12
- Bernika, F., Saerang, D. P., & Gamaliel, H. (2023). Implementation and implications of regional government information system (SIPD) on expenditure administration. *Accounting and Finance Studies*, 3(3), 229–238. <https://doi.org/10.47153/afs33.7592023>
- Biancone, P., Brescia, V., Chmet, F., & Lanzalonga, F. (2024). The evolution of integrated popular financial reporting: Toward a digital-driven collaborative approach using sentiment analysis tool. *EuroMed Journal of Business*, 20(5), 75–97. <https://doi.org/10.1108/EMJB-11-2023-0298>
- Bu, F. (2025). The effect of digital government construction on the enhancement of public governance capacity: An analysis based on financial information transparency. *International Review of Financial Analysis*, 107, 104648. <https://doi.org/10.1016/j.irfa.2025.104648>
- Chen, W., Cai, W., Hu, Y., Zhang, Y., & Yu, Q. (2022). Gimmick or revolution: Can corporate digital transformation improve accounting information quality? *International Journal of Emerging Markets*, 19(10), 2966–2990. <https://doi.org/10.1108/IJOEM-04-2022-0572>

- Chen, X., & Cao, Y. (2025). Digital governance, financial support, and intellectual property protection transformation. *Finance Research Letters*, 85, 108250. <https://doi.org/10.1016/j.frl.2025.108250>
- DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60–95. <https://doi.org/10.1287/isre.3.1.60>
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9–30. <https://doi.org/10.1080/07421222.2003.11045748>
- Gao, M., Peng, J., & Wang, H. (2025). Algorithmic transparency, financial stability, and enterprise digital transformation. *Finance Research Letters*, 86, 108481. <https://doi.org/10.1016/j.frl.2025.108481>
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (9th ed.). Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Ibrahim, S., Begkos, C., Arnaboldi, M., Graham, C., & Rakeeb, F. R. (2025). Performance measurement, financial reporting quality, and digitalization in the healthcare sector. *The British Accounting Review*, 57(6), 101738. <https://doi.org/10.1016/j.bar.2025.101738>
- Jin, P., & Wang, Z. (2025). Digital budget supervision governance and local government fiscal transparency. *International Review of Economics & Finance*, 102, 104306. <https://doi.org/10.1016/j.iref.2025.104306>
- Kajol, K., Singh, R., & Paul, J. (2022). Adoption of digital financial transactions: A review of literature and future research agenda. *Technological Forecasting and Social Change*, 184, 121991. <https://doi.org/10.1016/j.techfore.2022.121991>
- Kartika, V. N., & Ningsih, S. (2024). The influence of internal control systems, implementation of government accounting standards, and human resource competence on financial report quality. *Jurnal Akuntansi dan Auditing*, 21(1), 24–38. <https://doi.org/10.14710/jaa.21.1.24-38>
- Li, C., Feng, W.-X., Han, S., Gupta, S., & Kamble, S. (2022). Digital adaptive governance, digital transformation, and service quality in logistics enterprises. *Journal of Global Information Management*, 30(1). <https://doi.org/10.4018/JGIM.309377>
- Liu, C., & Li, Y. (2025). How does government transparency affect regional financing efficiency? An examination based on the level of provincial government information disclosure. *International Review of Financial Analysis*, 106, 104496. <https://doi.org/https://doi.org/10.1016/j.irfa.2025.104496>
- Liu, Y., Tang, Z., & Shao, W. (2024). Corporate financial digitalization, internal governance, and social trust. *Finance Research Letters*, 70, 106295. <https://doi.org/10.1016/j.frl.2024.106295>

- Liu, Y., Tang, Z., & Shao, W. (2024). Corporate financial digitalization, internal governance, and social trust. *Finance Research Letters*, 70, 106295. <https://doi.org/https://doi.org/10.1016/j.frl.2024.106295>
- Long, Y., Zhang, X., & Wang, L. (2025). How does government data openness affect cross-regional capital flow? Evidence from Chinese-listed firms' off-site investment. *Economic Modelling*, 152, 107289. <https://doi.org/https://doi.org/10.1016/j.econmod.2025.107289>
- Mendriadi, L. S., Widnyani, I. A. P. S., & Dewi, N. D. U. (2024). The effectiveness of the implementation of SIPD in efforts to support financial administration in Buleleng Regency government. In D. B. Irawan, A. P. Nugroho Wicaksono, A. Widiyastuti, R. Febriani, & A. Roizqin (Eds.), *Economic Sustainability and Social Equality in the Technological Era: Proceedings of the 3rd International Conference on Humanities and Social Sciences (ICH SOS 2023)*, 30–31 August 2023, Malang, Indonesia (pp. 377–383). Routledge. <https://doi.org/10.1201/9781003534495>
- Meng, L., Wang, H., & Liao, L. (2025). The dynamic impact mechanism of digital government development on enterprise digital transformation: A quasi-natural experiment analysis based on big data governance institutional reform. *Finance Research Letters*, 85, 108121. <https://doi.org/10.1016/j.frl.2025.108121>
- Morshed, A. (2025). Navigating tradition and modernity: Digital accounting and financial integration in family-owned enterprises in the Arab Gulf. *Sustainable Futures*, 9, 100680. <https://doi.org/10.1016/j.sftr.2025.100680>
- Nangoy, N. A. M., Tinangon, J. J., & Warongan, J. D. (2025). Analysis of the implementation and implications of the regional government information system (SIPD) in regional financial management (Study in North Sulawesi Province). *The Contrarian: Finance, Accounting, and Business Research*, 4(1), 29-36. <https://doi.org/10.58784/cfabr.253>
- Nasiri, M., Saunila, M., & Ukko, J. (2022). Digital orientation, digital maturity, and digital intensity: Determinants of financial success in digital transformation settings. *International Journal of Operations & Production Management*, 42(13), 274–298. <https://doi.org/10.1108/IJOPM-09-2021-0616>
- Pemerintah Republik Indonesia. (2010). *Peraturan Pemerintah Republik Indonesia Nomor 71 Tahun 2010 tentang Standar Akuntansi Pemerintahan*. Sekretariat Negara Republik Indonesia.
- Pinontoan, V. R. ., Pangkey, I. ., & Mamonto, F. H. . (2025). Effectiveness of the Regional Government Information System (SIPD) implemented in the General Affairs Section of the Regional Secretariat of North Minahasa Regency. *International Journal of Information Technology and Education*, 4(3), 47–57. Retrieved from <https://ijite.jredu.id/index.php/ijite/article/view/237>
- Purnamasari, R., Hasanudin, A. I., Zulfikar, R., & Yazid, H. (2025). Technological infrastructure and financial resource availability in enhancing public services and government performance: The role of digital innovation adoption in Indonesia. *Social Sciences & Humanities Open*, 11, 101621. <https://doi.org/10.1016/j.ssaho.2025.101621>
- Razak, L. A., & Anriani, N. (2024, December). *Implementation of the regional government information system (SIPD) at the Takalar Regency Regional Financial and Revenue Management Agency*. In *IECON* (Vol. 2, No. 1, pp. 391–405). <https://doi.org/10.65246/rwgrb023>

- Schinagl, S., Shahim, A., & Khapova, S. (2022). Paradoxical tensions in the implementation of digital security governance: Toward an ambidextrous approach to governing digital security. *Computers & Security*, 122, 102903. <https://doi.org/10.1016/j.cose.2022.102903>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- Shi, W., & Zhang, Z. (2025). Exploring the role of digital governance: The effect of audit digitalization on firms' internal control weaknesses in China. *International Journal of Accounting Information Systems*, 56, 100756. <https://doi.org/10.1016/j.accinf.2025.100756>
- Tornatzky, L. G., & Fleischer, M. (1990). *The processes of technological innovation*. Lexington Books.
- Ullah, S., Nobanee, H., & Iftikhar, H. (2023). Global financial integration, governance-by-technology, and green growth. *International Review of Financial Analysis*, 90, 102838. <https://doi.org/https://doi.org/10.1016/j.irfa.2023.102838>
- Umaira, S., & Setyaningrum, D. (2025). Analysis of SIPD Implementation Using the Technology Acceptance Model and Personal Innovativeness. *Journal Transnational Universal Studies*, 3(9), 219-230. <https://doi.org/10.58631/jtus.v3i9.188>
- Wang, L., & Huang, S. (2025). An empirical analysis of digital financial innovation, corporate financing behavior, and information transparency. *Finance Research Letters*, 86, 108840. <https://doi.org/10.1016/j.frl.2025.108840>
- Wei, S., Jiang, F., Pan, J., & Cai, Q. (2023). Financial innovation, government auditing and corporate high-quality development: Evidence from China. *Finance Research Letters*, 58, 104567. <https://doi.org/https://doi.org/10.1016/j.frl.2023.104567>
- Wilkinson, J. W., Cerullo, M. J., Raval, V., & Wong-On-Wing, B. (2020). *Accounting information systems: Essential concepts and applications* (6th ed.). Wiley.
- Winoto, S. A., & Bandi. (2024). Corporate governance and financial transparency: Evidence from Indonesian manufacturing companies. *Jurnal Akuntansi dan Auditing*, 21(1), 84–102. <https://doi.org/10.14710/jaa.21.1.84-102>
- Wu, S., & Liu, Z. (2025). Environment, social, governance and earning quality: The moderating effect of digital transformation. *Finance Research Open*, 1(3), 100027. <https://doi.org/10.1016/j.fmr.2025.100027>
- Xu, C., & Hu, J. (2023). Does China's Belt and Road Initiative improve financial reporting quality? *Finance Research Letters*, 58, 104628. <https://doi.org/https://doi.org/10.1016/j.frl.2023.104628>
- Yang, Q., Qian, L., & Zhao, X. (2021). Does information technology governance strengthen or weaken contract control in digital platform relationships? *Industrial Management & Data Systems*, 122(1), 20–36. <https://doi.org/10.1108/IMDS-02-2021-0124>
- Yunis, M., Mirza, N., Safi, A., & Umar, M. (2024). Impact of audit quality and digital transformation on innovation efficiency: Role of financial risk-taking. *Global Finance Journal*, 62, 101026. <https://doi.org/10.1016/j.gfj.2024.101026>

- Zeng, H., Ran, H., Zhou, Q., Jin, Y., & Cheng, X. (2022). The financial effect of firm digitalization: Evidence from China. *Technological Forecasting and Social Change*, 183, 121951. <https://doi.org/10.1016/j.techfore.2022.121951>
- Zeng, Z., & Tang, J. (2025). How does the level of digital governance moderate the impact of blockchain technology on green credit issuance? *Finance Research Letters*, 86, 108363. <https://doi.org/10.1016/j.frl.2025.108363>
- Zhang, R., & Ma, X. (2025). Governance strategies for the development of digital finance and the enhancement of corporate internal control quality. *Finance Research Letters*, 85, 108178. <https://doi.org/10.1016/j.frl.2025.108178>
- Zhu, E., & Lang, S. (2025). Local government debt expansion and regional financial risks: mitigation effect of financial regulation or risk resonance? *Finance Research Letters*, 86, 108608. <https://doi.org/https://doi.org/10.1016/j.frl.2025.108608>
- Zong, H., & Wang, Y. (2025). Impacts of government public data openness and digital financial development on corporate information reliability. *International Review of Economics & Finance*, 103, 104495. <https://doi.org/10.1016/j.iref.2025.104495>
- Rachman, A., Yochanan, E., Samanlangi, A. I., & Purnomo, H. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.