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The Effect of the Internal Control System and the Implementation of the Regional Government Information System on the Quality of Financial Statements at the Regional Financial and Asset Management Agency of Medan City

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ABSTRACT

The quality of financial statements reflects the extent to which government reports present relevant, reliable, comparable, and understandable information. This study analyzes the effect of the internal control system and the implementation of the regional government information system on the quality of financial statements at the Regional Financial and Asset Management Agency of Medan City. A quantitative associative approach was applied. The population consisted of all 48 employees of the agency, and a saturated sampling technique was used so that the entire population became the sample. Data were collected through questionnaires and analyzed using multiple linear regression. The results show that the internal control system has a positive and significant partial effect on the quality of financial statements. The implementation of the regional government information system also has a positive and significant partial effect and is the dominant predictor. Simultaneously, both variables have a positive and significant effect and jointly explain 97.6 percent of the variance in the quality of financial statements. These findings indicate that strong internal control and a well-functioning information system complement each other in producing high-quality government financial statements. The agency should strengthen leadership commitment and risk mitigation and improve server stability.

Keywords: *Internal Control System; Regional Government Information System; Quality of Financial Statements; Local Government*

INTRODUCTION

Local government financial statements are the primary instrument through which a government accounts to the public for the management of regional finances. Under the Government Accounting Standards (Government Regulation No. 71, 2010), high-

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quality financial statements must be relevant, reliable, comparable, and understandable, and their quality is widely regarded as an indicator of the success of a local government. Several factors shape this quality, including human resources, internal control, the use of technology, regulations, and accounting standards.

Internal control is one of the most important of these factors. Government Regulation No. 60 (2008) on the Government Internal Control System (*Sistem Pengendalian Intern Pemerintah*, SPIP) defines internal control as an integral process of continuous actions by leaders and all employees that provides reasonable assurance that organizational objectives, including reliable financial reporting, are achieved. When transactions pass through adequate authorization, recording, and monitoring, the resulting information is more accurate, reliable, and free of material misstatement. Weak control, in contrast, invites recording errors and the misappropriation of assets, which ultimately lower the quality of financial statements.

The quality of local government financial statements is also affected by the implementation of the Regional Government Information System (*Sistem Informasi Pemerintahan Daerah*, SIPD). Ministry of Home Affairs Regulation No. 70 (2019) describes SIPD as a system that documents, administers, and processes regional government data into systematically presented information to support planning, financial, and development functions. By integrating administration, accounting, and reporting on a single platform, an optimally implemented SIPD can improve data accuracy, accelerate the preparation of reports, and reduce manual recording errors. When implementation is hampered by technical constraints or limited user capability, however, timely and accurate reporting is put at risk.

The Regional Financial and Asset Management Agency (*Badan Keuangan dan Aset Daerah*, BKAD) of Medan City is the regional apparatus responsible for managing regional finances, from budget preparation, administration, and accounting to the preparation of the Local Government Financial Statements. The Medan City Government received an unqualified opinion from the Audit Board of the Republic of Indonesia (*Badan Pemeriksa Keuangan*, BPK RI) on these statements for fiscal years 2020 to 2024, after receiving qualified opinions from 2017 to 2019. An unqualified opinion, however, does not mean that financial management is free of weaknesses, and the audit board continues to recommend stronger internal control and better compliance with regulations. The audit of the 2024 financial statements, for example, found that the land under Management Right (HPL) I Petisah Tengah, valued at Rp4,114,826,625,000, had not been presented as investment property (BPK RI, 2025). This finding suggests that the identification, classification, and recording of regional assets were not yet fully supported by adequate control activities, which, as Mulyadi (2016) points out, are meant to check the accuracy and reliability of accounting data.

Medan City began adjusting to SIPD in 2020 and has used it to manage the regional budget since fiscal year 2021. Early implementation was not yet optimal, as limited

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user understanding, short technical training, and system quality that needed refinement were reported (Nasution & Nurwani, 2021). Pre-research interviews with BKAD staff indicate that such constraints persist in another form, namely frequent server downtime that delays transaction input and, in turn, the timely preparation of financial statements. These conditions show that the success of SIPD depends not only on user readiness but also on the reliability of the technological infrastructure and on internal control that ensures every transaction processed in the system is supported by sufficient evidence and recorded correctly.

Previous studies on this subject have produced inconsistent results. Atharrizka et al. (2021) found that neither the accounting information system nor internal control had a significant partial effect on the quality of local government financial statements in Bogor City, whereas Bale et al. (2023) found that the accounting information system had no effect but internal control did in Kupang City. Fatimah and Indrawati (2022), Heinrich and Probohudono (2023), and Astuti et al. (2025) reported positive effects of internal control and related systems, and Barus et al. (2023) found effects that varied with the readiness of resources and institutions. These differences point to a research gap and suggest that the effects depend on the institutional context, so they cannot simply be generalized across regions. Studies on the combined effect of SIPD and internal control at the BKAD of Medan City, especially for the current period, are still scarce.

This study therefore aims to analyze the partial and simultaneous effects of the internal control system and the implementation of SIPD on the quality of financial statements at the BKAD of Medan City. Using questionnaire data from all 48 employees of the agency and multiple linear regression, the study shows that both variables have positive and significant effects, with SIPD implementation as the dominant predictor. The study contributes empirical evidence to public sector accounting from a local government context and offers practical inputs for strengthening financial governance in Medan City.

LITERATURE REVIEW

Theoretical foundation

This study draws on three theories. Agency theory (Jensen & Meckling, 1976) describes a contract in which a principal delegates authority to an agent. Because the agent holds more information than the principal, information asymmetry arises and, with it, the risks of moral hazard and adverse selection (Eisenhardt, 1989). In local government, the community and the Regional House of Representatives are the principals, and the local government, including BKAD, is the agent entrusted with managing regional finances. Control mechanisms and high-quality financial statements reduce this asymmetry and give the principals assurance. Stewardship theory (Donaldson & Davis, 1991) offers a complementary view in which managers are assumed to be trustworthy and motivated to serve organizational goals. Internal control is then seen not as suspicion but as structural support for responsible stewardship.

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Finally, the Technology Acceptance Model (Davis, 1989; Venkatesh & Davis, 2000) explains that the use of an information system depends on perceived usefulness and perceived ease of use, and it is therefore relevant to how BKAD employees accept and use SIPD.

Quality of local government financial statements

Government Regulation No. 71 (2010) requires local government financial statements to provide relevant information on financial position and transactions for a reporting period. Mahmudi (2019) similarly describes them as reports that serve users' needs for economic, social, and political decisions. Their quality can be understood as the extent to which they meet four qualitative characteristics: relevance (feedback value, predictive value, timeliness, and completeness), reliability (faithful representation, verifiability, and neutrality), comparability, and understandability. In practice, quality is often judged by the audit opinion of BPK RI, but empirical studies commonly measure perceptions of the four characteristics through questionnaires, as in this study.

Internal control system

The COSO (2013) framework defines internal control as a process, effected by management and all personnel, that provides reasonable assurance regarding operational effectiveness, reliable reporting, and compliance. It consists of five components: control environment, risk assessment, control activities, information and communication, and monitoring. Government Regulation No. 60 (2008) applies the same logic to government agencies and adds the safeguarding of state and regional assets to the objectives of internal control. Mulyadi (2016) likewise lists safeguarding assets, checking the accuracy and reliability of accounting data, promoting efficiency, and encouraging compliance with management policies as the objectives of internal control.

Implementation of the Regional Government Information System

SIPD is regulated by Ministry of Home Affairs Regulation No. 70 (2019). Among other aims, it seeks to provide a single, accurate, and integrated set of regional data, to support planning, budgeting, administration, accounting, and reporting on one platform, and to improve the efficiency, timeliness, and accuracy of local government financial reports. Conceptually, SIPD is an application of an accounting information system, which processes data and transactions into information for planning, control, and operations (Krismiaji, 2015). Its implementation can be assessed through five indicators: system quality, information quality, service quality, human resource readiness, and the stability of technological infrastructure.

Previous studies and hypothesis development

Quantitative studies generally find that internal control affects the quality of local government financial statements. Fatimah and Indrawati (2022) showed that the government accounting system and internal control jointly had a positive and significant effect in Bandung Regency, and Heinrich and Probohudono (2023) and Astuti et al. (2025) reached comparable conclusions in Kaimana Regency and Malang City. Bale et al. (2023) also found an effect of internal control in Kupang City, although the accounting information system had none. Qualitative studies in North Sumatra support the importance of internal control in Pematangsiantar City (Awalia & Nasution, 2022) and Medan City (Matondang et al., 2025). Conceptually, each of the five components works directly on the processes that determine the

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reliability and accuracy of financial information, and agency theory underlines the role of control in reducing information asymmetry. The first hypothesis is therefore formulated as follows.

H_1: The internal control system affects the quality of financial statements at the BKAD of Medan City.

Evidence on information systems is more mixed. Nasution and Nurwani (2021) and Alfani and Nasution (2022) described technical constraints and limited user understanding in the early implementation of SIPD, while Atharrizka et al. (2021) and Bale et al. (2023) found no significant effect of accounting information systems on report quality. In theory, however, an accounting information system is meant to improve the quality and accuracy of the information presented (Krismiaji, 2015), and the Technology Acceptance Model suggests that a system perceived as useful and easy to use will be used more fully. The gap between empirical findings and theory, together with the server downtime still observed at BKAD, justifies testing the effect again.

H_2: The implementation of SIPD affects the quality of financial statements at the BKAD of Medan City.

Finally, internal control and SIPD are expected to complement each other. Control ensures that every transaction processed in the system is authorized, documented, and recorded correctly, while the system accelerates and integrates data processing. They are therefore expected to affect the quality of financial statements jointly. The relationships among the variables are shown in Figure 1.

H_3: The internal control system and the implementation of SIPD simultaneously affect the quality of financial statements at the BKAD of Medan City.

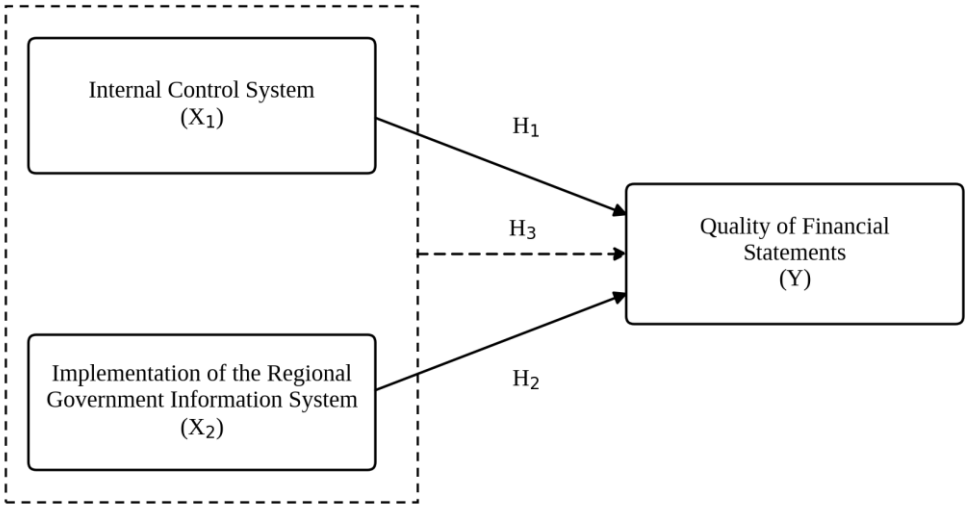


Figure 1. Conceptual Framework

METHODS

Research design, location, and time

This study uses a quantitative approach with an associative design to test the effect of two independent variables, the internal control system (X_1) and the implementation of SIPD (X_2), on one dependent variable, the quality of financial statements (Y). The quantitative approach was chosen because the hypotheses are tested through numerical measurement and statistical analysis. The research was conducted at the BKAD of Medan City from June to August 2026.

Population and sample

The population is all 48 employees of the BKAD of Medan City who are involved in regional financial management in four divisions: budgeting (7 employees), treasury (17), accounting (14), and assets (10). Because the population is small, a saturated (total) sampling technique was used so that the entire population became the sample (Sugiyono, 2022). The sample is not restricted to a particular position and includes both structural officials and implementing staff, with varying gender, age, education, and length of service.

Variables and measurement

Table 1 summarizes the variables and their indicators. All variables were measured with questionnaire statements on a five-point Likert scale: strongly agree (5), agree (4), less agree (3), disagree (2), and strongly disagree (1). The instrument contains 11 statements on the quality of financial statements, 13 on the internal control system, and 13 on SIPD implementation. The data are primary data collected through the questionnaire and supported by a literature study.

Table 1. Operationalization of Research Variables

Variable	Definition	Indicators
Internal control system (X_1)	An integral process of actions carried out continuously by leaders and all employees to provide reasonable assurance that organizational objectives are achieved (Government Regulation No. 60, 2008)	Control environment; risk assessment; control activities; information and communication; monitoring
Implementation of SIPD (X_2)	The actual application of the Regional Government Information System in documenting, administering, and processing regional financial data (Ministry of Home Affairs Regulation No. 70, 2019)	System quality; information quality; service quality; human resource readiness; infrastructure stability
Quality of financial statements (Y)	The extent to which financial statements meet the required qualitative characteristics so that the information is useful, reliable, and usable for decision making (Government Regulation No. 71, 2010)	Relevance; reliability; comparability; understandability

Source: Processed by the authors (2026).

Data analysis

Data were analyzed with SPSS. Descriptive statistics summarized the data. Instrument quality was tested through validity (item correlation compared with the r table value of 0.2845 for df = 46 at the 5% level) and reliability (Cronbach's alpha of at least 0.60) tests (Ghozali, 2016). The classical assumptions were examined through normality (normal P-P plot, histogram, and

the Shapiro–Wilk test, which suits samples below 50), heteroscedasticity (Glejser test and residual scatterplot), and multicollinearity (tolerance above 0.10 and variance inflation factor, VIF, below 10) tests. The hypotheses were then tested with the multiple linear regression model in Equation (1), using the t test for partial effects, the F test for the simultaneous effect, and the coefficient of determination (R^2).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \qquad (1)$$

where Y is the quality of financial statements, X_1 is the internal control system, X_2 is the implementation of SIPD, α is the constant, β_1 and β_2 are the regression coefficients, and ε is the error term.

RESULTS

Respondent profile

The study involved 48 respondents from the four divisions. Table 2 shows that most respondents were female (56.3%), aged 25 years or older (95.8%), had worked for five years or more (87.5%), and held a bachelor's degree (81.3%). By division, treasury had the most respondents (35.4%), followed by accounting (29.2%), assets (20.8%), and budgeting (14.6%).

Table 2. Characteristics of Respondents

Characteristic	Category	n	%
Gender	Male	21	43.8
	Female	27	56.3
Age	< 25 years	2	4.2
	≥ 25 years	46	95.8
Length of service	< 5 years	6	12.5
	≥ 5 years	42	87.5
Education	Bachelor's degree	39	81.3
	Master's degree	9	18.8
Division	Budgeting	7	14.6
	Treasury	17	35.4
	Accounting	14	29.2
	Assets	10	20.8
Total respondents		**48**	**100.0**

Source: Processed primary data (2026). Percentages may not add up to 100 because of rounding.

Descriptive statistics

Table 3 presents the descriptive statistics. The quality of financial statements (Y) has a mean score of 43.96 (3.99 per item), which falls in the good category. The internal control system (X_1) has a mean of 48.81 (3.75 per item), categorized as fairly good, while the implementation of SIPD (X_2) has a mean of 39.52 (3.04 per item), categorized as moderate, which is consistent with the technical constraints related to servers and networks. The standard deviation of each variable is smaller than its mean, indicating that responses are relatively homogeneous.

Table 3. Descriptive Statistics (N = 48)

Variable	Min.	Max.	Mean	Mean per item	Std. deviation
Quality of financial statements (Y)	35	51	43.96	3.99	4.125
Internal control system (X_1)	35	57	48.81	3.75	6.728
Implementation of SIPD (X_2)	25	53	39.52	3.04	6.968

Source: SPSS output, processed primary data (2026).

Instrument quality

All questionnaire items are valid, because every item correlation exceeds the r table value of 0.2845 (Table 4). The Cronbach's alpha coefficients of 0.619 for the quality of financial statements, 0.803 for the internal control system, and 0.859 for SIPD implementation all exceed the 0.60 threshold, so the instrument is reliable. The reliability of the scale for the quality of financial statements, however, is only marginally above the threshold.

Table 4. Validity and Reliability Tests

Variable	Items	Range of r	r table	Cronbach's alpha	Result
Quality of financial statements (Y)	11	0.288–0.682	0.2845	0.619	Valid, reliable
Internal control system (X_1)	13	0.315–0.690	0.2845	0.803	Valid, reliable
Implementation of SIPD (X_2)	13	0.447–0.805	0.2845	0.859	Valid, reliable

Source: SPSS output, processed primary data (2026).

Classical assumption tests

Table 5 summarizes the classical assumption tests. The Shapiro–Wilk significance values are 0.063 for the quality of financial statements and 0.254 for the predicted values, both above 0.05, and the normal P-P plot in Figure 2(a), in which the points follow the diagonal line, also indicates that normality is met. The Glejser test gives significance values of 0.947 for X_1 and 0.918 for X_2, and the residual scatterplot in Figure 2(b) shows no systematic pattern, so heteroscedasticity does not occur. Tolerance values of 0.126 (above 0.10) and VIF values of 7.930 (below 10) show that multicollinearity is not a problem, although the VIF is relatively close to the upper limit.

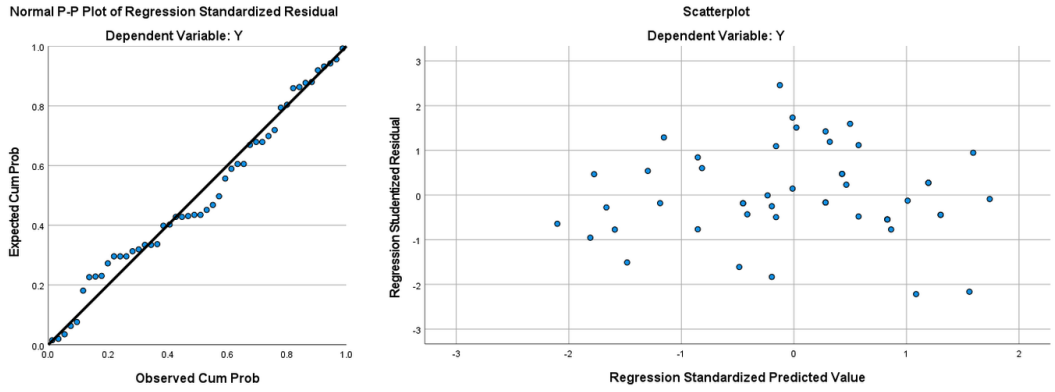
Table 5. Summary of Classical Assumption Tests

Test	Indicator	Value	Conclusion
Normality (Shapiro–Wilk)	Sig. (Y)	0.063	Normal (Sig. > 0.05)
	Sig. (predicted value)	0.254	Normal (Sig. > 0.05)
Heteroscedasticity (Glejser)	Sig. (X_1)	0.947	No heteroscedasticity
	Sig. (X_2)	0.918	No heteroscedasticity
Multicollinearity	Tolerance (X_1, X_2)	0.126	No multicollinearity
	VIF (X_1, X_2)	7.930	No multicollinearity

Source: SPSS output, processed primary data (2026).

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(a) (b)

Figure 2. (a) Normal P-P Plot of Regression Standardized Residual and (b) Scatterplot for the Heteroscedasticity Test

Multiple linear regression and hypothesis tests

Table 6 presents the regression results, which yield the estimated model in Equation (2). The constant indicates that the quality of financial statements is 18.908 when both independent variables are zero. A one-unit increase in the internal control system raises the quality of financial statements by 0.153 units, and a one-unit increase in SIPD implementation raises it by 0.444 units, holding the other variable constant.

$$Y = 18.908 + 0.153X_1 + 0.444X_2 \qquad (2)$$

Table 6. Multiple Linear Regression and Partial (t) Test

Variable	B	Std. error	Beta	t	Sig.
(Constant)	18.908	0.743	–	25.461	< 0.001
Internal control system (X_1)	0.153	0.039	0.250	3.929	< 0.001
Implementation of SIPD (X_2)	0.444	0.038	0.751	11.791	< 0.001

Dependent variable: quality of financial statements (Y). Source: SPSS output, processed primary data (2026).

The partial t tests show that the internal control system ($t = 3.929$, $p < 0.001$) and SIPD implementation ($t = 11.791$, $p < 0.001$) each have a positive and significant effect on the quality of financial statements, because both t values exceed the critical value of about 1.68. H_1 and H_2 are therefore accepted. The standardized coefficients (0.250 and 0.751) show that SIPD implementation is the stronger predictor.

The simultaneous F test in Table 7 gives $F = 955.819$ ($p < 0.001$), far above the critical value of about 3.20, so H_3 is accepted: the internal control system and SIPD implementation jointly have a positive and significant effect on the quality of financial statements. The correlation coefficient (R) is 0.988, R^2 is 0.977, and the adjusted R^2 is 0.976, meaning that 97.6% of the variance in the quality of financial statements is explained by the two variables, while the remaining 2.4% is explained by other factors. The standard error of the estimate is small (0.639).

Table 7. Simultaneous (F) Test (ANOVA)

Source	Sum of squares	df	Mean square	F	Sig.
Regression	781.520	2	390.760	955.819	< 0.001

Source	Sum of squares	df	Mean square	F	Sig.
Residual	18.397	45	0.409		
Total	799.917	47			

Dependent variable: quality of financial statements (Y); predictors: constant, X_1, X_2. Source: SPSS output, processed primary data (2026).

DISCUSSION

This study set out to determine whether the internal control system and the implementation of SIPD affect the quality of financial statements at the BKAD of Medan City, partially and simultaneously. The results show that both variables have positive and significant effects and that together they explain almost all of the variance in report quality, so H_1, H_2, and H_3 are all supported. The findings matter because the Medan City Government has repeatedly received an unqualified opinion, yet the audit findings and the technical constraints reported by staff show that the sources of report quality still need to be examined at the operational level.

Internal control system and the quality of financial statements (H_1)

The significant positive effect of internal control (B = 0.153, $p < 0.001$) is consistent with agency theory. Control mechanisms reduce information asymmetry between the government as the agent and the community and the Regional House of Representatives as the principals, so that data are processed without distortion and the resulting reports are accountable (Jensen & Meckling, 1976). It also agrees with the COSO (2013) framework, in which the five components work directly on the processes that determine the accuracy and reliability of financial information. The result is in line with studies that found a positive effect of internal control on report quality (Suwanda, 2015; Putra & Wirawati, 2018; Raharjo & Setiawan, 2020; Fatimah & Indrawati, 2022; Awalia & Nasution, 2022; Heinrich & Probohudono, 2023; Bale et al., 2023; Matondang et al., 2025). It differs from Atharrizka et al. (2021), who found no significant partial effect in Bogor City. A plausible explanation is a difference in governance maturity: five consecutive unqualified opinions for Medan City (2020–2024) suggest a relatively established control foundation, which strengthens the effect found here.

The questionnaire responses show where the control system is strong and where it is not. The mean score is fairly good (3.75 per item), and respondents rated the organizational structure (70.9% positive) and internal communication (70.8% positive) favorably. Yet 43.8% of respondents answered "less agree" on leadership commitment, the enforcement of ethics and integrity, and discipline in standard operating procedures, and 41.7% did so on the segregation of duties. In addition, 31.3% disagreed that risks are identified routinely, and 22.9% disagreed on the effectiveness of whistleblowing and on independent monitoring and evaluation. Weakness in risk identification and independent monitoring is conceptually in line with the audit finding on the land asset that had not been presented as investment property (BPK RI, 2025), an error that is more likely to be caught before the statements are finalized when risks are identified early and monitoring is independent. The significant effect should therefore be interpreted proportionately: internal control works at a fairly good level overall but is not yet optimal in its preventive and detective aspects.

The coefficient of internal control (0.153) is smaller than that of SIPD (0.444). Internal control operates largely as an enabling mechanism behind the scenes, whereas SIPD is the instrument

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that touches daily data processing and report preparation directly, so its marginal contribution is statistically larger even though the effect of internal control remains strong. The finding also supports stewardship theory (Donaldson & Davis, 1991). Control can be read not only as oversight of opportunistic behavior but also as structural support that gives employees clear guidelines and boundaries, so that employees who are oriented toward organizational interests can work more accurately and accountably.

Implementation of SIPD and the quality of financial statements (H_2)

SIPD implementation has a positive and significant effect (B = 0.444, $p < 0.001$) and is the dominant predictor (standardized beta = 0.751). According to the Technology Acceptance Model (Davis, 1989), employees who perceive SIPD as useful and easy to use are motivated to process data accurately and in an integrated way. The result also fits the view that accounting information systems are meant to improve the quality and accuracy of information (Krismiaji, 2015). It agrees with studies reporting that SIPD or related digitalization improves workflow efficiency, data reliability, and the quality of financial reporting (Indriyani & Yuhertiana, 2021; Handayani & Pratama, 2022; Nugroho & Rahayu, 2023). The persistent constraints in user understanding, training, and infrastructure documented by Nasution and Nurwani (2021) and Alfani and Nasution (2022) are likewise reflected in the descriptive results here. In contrast, Atharrizka et al. (2021) and Bale et al. (2023) found no significant effect of accounting information systems on report quality in Bogor City and Kupang City.

The descriptive results qualify this finding. SIPD implementation has the lowest mean score (3.04 per item, moderate). Although 64.6% of respondents said that SIPD speeds up the preparation of financial statements, all respondents (100%) were unfavorable about technical support and help desk services, network and server stability, and the frequency of technical disruptions such as server downtime, and 56.3% felt that the accuracy of financial information was not yet optimal. Even so, employees consider SIPD to provide real benefits for the timeliness and accuracy of report preparation, which implies that improving infrastructure stability could make these benefits felt more fully.

Simultaneous effect of internal control and SIPD (H_3)

The F test and the coefficient of determination show that internal control and SIPD jointly explain 97.6% of the variance in the quality of financial statements. The sociotechnical systems perspective (Trist & Bamforth, 1951) helps to interpret this result: organizational performance depends on the fit between the social system (internal control, work rules, and people) and the technical system (the SIPD application). Advanced technology without strict internal control raises the risk of data misuse, whereas strict control without automated information systems delays the presentation of data. The result is in line with Lestari and Firmansyah (2020), Sari and Hariyanto (2022), and Wibowo and Kusuma (2023), who found that internal control and information technology jointly determine report quality and public accountability.

Internal control and SIPD are thus complementary rather than substitutes. Control ensures that each transaction processed in SIPD complies with regulations, has adequate supporting evidence, and is recorded correctly, while SIPD accelerates and integrates the processing of that data into timely and accurate reports. The remaining 2.4% of the variance may be

explained by factors outside the model, such as human resource competence and other institutional factors.

Implications of the audit finding and its link to internal control weaknesses

The audit finding deserves closer attention because of its size and nature. The land under HPL I Petisah Tengah, valued at about Rp4.1 trillion (Rp4,114,826,625,000), had not been presented as investment property (BPK RI, 2025). Leaving out an asset of this magnitude means that the investment property balance does not reflect actual conditions. This weakens the reliability of the statements, particularly faithful representation, and reduces their usefulness for decisions by the Regional House of Representatives, the public, and other stakeholders. It also weakens accountability, because in agency terms the principals receive an incomplete picture of the resources entrusted to the agent. In practical terms, the agency must devote effort to following up the audit recommendations, and similar findings in the future could erode confidence in the unqualified opinion that Medan City has held since 2020.

The questionnaire results point to specific control weaknesses that could allow such an omission, and Table 8 maps them to the five control components. Regarding control activities, 41.7% of respondents answered "less agree" on the segregation of duties and 43.8% on discipline in standard operating procedures. When the identification, classification, and recording of an asset are not clearly separated and procedures are not followed consistently, a high-value asset can remain unrecorded or misclassified without anyone noticing. Regarding risk assessment, 31.3% disagreed that risks are identified routinely, so the risk that major assets are unrecorded may not be flagged early. Regarding monitoring, 22.9% disagreed on the effectiveness of independent monitoring and evaluation, which suggests that errors are not always detected before the statements are finalized. Regarding the control environment, 43.8% answered "less agree" on leadership commitment and the enforcement of ethics, which can affect the priority given to asset reconciliation. In contrast, information and communication was rated favorably (70.8%), so the problem appears to lie less in the flow of information than in verification and oversight. These links are conceptual: the questionnaire measured perceptions and does not test the audit finding directly.

Table 8. Linking Questionnaire Evidence to the Audit Finding and Recommended Actions

Control component	Questionnaire evidence	Possible link to the asset finding	Recommended action
Control environment	43.8% less agree on leadership commitment and enforcement of ethics	Accurate asset recording is not treated as a leadership priority	Leader-endorsed targets for asset accountability, reviewed regularly in management meetings
Risk assessment	31.3% disagree that risks are identified routinely	Risk of unrecorded or misclassified high-value assets is not flagged early	A periodic risk register for asset recording and classification, covering land and management rights
Control activities	43.8% less agree on procedural discipline; 41.7% on segregation of duties	Identification, classification, and recording are not separated or consistently followed	Written procedures with separate roles for asset identification, classification, and accounting recording; periodic reconciliation of asset and accounting records

Control component	Questionnaire evidence	Possible link to the asset finding	Recommended action
Monitoring	22.9% disagree on independent monitoring and on whistleblowing effectiveness	Misstatements are not detected before the statements are finalized	Independent review of asset balances before finalization; tracking of audit recommendations to completion
Information and communication	70.8% positive on internal communication	Not the main weakness	Maintain, and strengthen coordination between the asset and accounting divisions

Source: Processed primary data (2026) and BPK RI (2025). The recommended actions are the authors' suggestions.

For the BKAD of Medan City, quality improvement should therefore proceed on two fronts at once. The first is to strengthen internal control where respondents are least satisfied, starting with the asset management cycle as outlined in Table 8. Because the agency also operates a separate asset management information system (SIMBADA), reconciling it regularly with the accounting records processed in SIPD is a practical control against omissions of this kind. The second is to stabilize SIPD by coordinating with the central SIPD administrators to improve server capacity and by providing a responsive help desk and continuing technical training for users.

Limitations and future research

Several limitations should be noted. The study covers a single agency, uses a cross-sectional design, and relies on employees' perceptions measured by questionnaires, so common-method and self-assessment bias cannot be excluded. Because the sample comprises all 48 employees of one agency, the results validate the research model only within this setting and cannot be generalized to other regions. The very high explanatory power ($R^2 = 0.977$) and the relatively high VIF (7.930) also suggest that the two predictors and the outcome are strongly intercorrelated in respondents' perceptions.

Future research should therefore test whether the model is consistent in wider settings. First, the sample can be broadened to include users of SIPD in other regional apparatus that prepare entity-level statements, as well as internal supervisors, so that the view of the preparers is complemented by that of other stakeholders. Second, the model can be compared across other cities and regencies in North Sumatra and beyond, preferably with differing audit opinion histories, using multi-group regression or region as a moderating variable to examine whether the coefficients remain stable. Third, longitudinal designs can show how the effect of SIPD changes as system stability improves. Fourth, perceptual data can be combined with objective indicators such as audit opinions and audit findings, and with document analysis or interviews, so that the link between control weaknesses and specific findings can be tested directly. Finally, variables such as human resource competence, organizational commitment, or leadership style can be added to explain the remaining variance.

CONCLUSION

This study concludes that the internal control system and the implementation of the Regional Government Information System each have a positive and significant partial effect on the quality of financial statements at the Regional Financial and Asset Management Agency of

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Medan City, and that together they have a positive and significant simultaneous effect, explaining 97.6% of the variance. SIPD implementation is the more dominant predictor, but the two factors complement each other.

The agency is advised to strengthen leadership commitment, ethical enforcement, segregation of duties, and routine risk mitigation to prevent recording errors in assets, and to coordinate with the central system administrators to stabilize servers and provide responsive technical support. It should also reconcile asset records with accounting records and ensure independent review of asset balances before the statements are finalized. Future researchers are advised to broaden the sample and to compare the model across other local governments to validate its consistency, and to add variables such as human resource competence, organizational commitment, or leadership style.

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