Assessing the Relationship Between IT Governance, System Success, and Financial Reporting Quality in Local Government

Sri Hidayati, Solly Aryza, Muhammad Syahputra Novelan

Abstract.

This study examines the relationship between information technology (IT) governance, information system success, and financial reporting quality in local government, focusing on the implementation of the Regional Asset Management Information System (SIMDA-BMD) in Deli Serdang Regency, Indonesia. The study integrates the COBIT 2019 framework to assess IT governance effectiveness, the DeLone and McLean Information Systems Success Model to evaluate system quality, information quality, service quality, system use, and user satisfaction, and the Analytical Hierarchy Process (AHP) to determine improvement priorities. Data are collected through questionnaires and interviews involving SIMDA-BMD operators, regional asset managers, and financial administration personnel. The analytical approach examines the relationships among governance effectiveness, information system success, net benefits, and financial reporting quality. The expected findings provide empirical insights into how effective IT governance and successful information systems contribute to more reliable, relevant, and accountable financial reporting. This study offers an integrated evaluation framework to support digital governance improvement and evidence-based decision-making in local government.

Keywords: IT Governance; COBIT 2019; DeLone and McLean Model; SIMDA-BMD; Net Benefits; Financial Reporting Quality; AHP.

Sri Hidayati
Postgraduate Student, Universitas Pembangunan Panca Budi, Indonesia
e-mail: adellia.putridani@gmail.com

Solly Aryza, Muhammad Syahputra Novelan
e-mail: sollyaryzalubis@gmail.com , putranovelan@dosen.pancabudi.ac.id
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Introduction.

The development of information technology has significantly transformed public sector financial management, particularly in the administration of government assets, financial accountability, and the preparation of financial statements. Local governments are increasingly required to implement integrated information systems to improve administrative efficiency, data accuracy, transparency, and accountability in public financial management. Digital transformation in government institutions is therefore not merely concerned with the adoption of information systems but also requires effective IT governance to ensure that technology investments generate measurable organizational benefits and support institutional performance.

In the context of local government, the management of regional property (Barang Milik Daerah/BMD) represents an important component of public financial accountability. Accurate asset recording, systematic inventory management, periodic reconciliation, and reliable reporting are essential to ensuring the quality of local government financial statements. Inaccurate asset information, delayed data updates, inconsistencies between asset records and financial reports, and inadequate internal coordination may negatively affect the reliability and completeness of financial information. Consequently, the effectiveness of information systems used for regional asset management becomes an important factor in supporting the quality of government financial reporting.

The Regional Asset Management Information System (SIMDA-BMD) is utilized to facilitate the administration and management of regional government assets. However, the successful implementation of SIMDA-BMD cannot be measured solely by its operational availability or the number of users accessing the system. Its effectiveness should also be evaluated in terms of IT governance arrangements, system quality, information quality, user satisfaction, utilization, and the benefits generated for government organizations. This perspective highlights the importance of examining the relationship between IT governance, information system success, and financial reporting quality within local government institutions.

The effectiveness of IT governance is particularly important because government information systems operate within complex organizational environments involving multiple stakeholders, administrative procedures, regulatory requirements, and accountability mechanisms. COBIT 2019 provides a comprehensive framework for evaluating and managing enterprise information and technology through governance and management objectives. The framework emphasizes stakeholder value, resource optimization, risk management, and the alignment of IT processes with organizational objectives (ISACA, 2019). Through its governance and management domains, COBIT 2019 enables organizations to assess whether information technology resources are managed effectively and whether their implementation contributes to institutional performance. Furthermore, information system success needs to be examined from the perspectives of both technological performance and organizational outcomes. The DeLone and McLean Information Systems Success Model provides an established theoretical foundation for evaluating system effectiveness through six interconnected dimensions: system quality, information quality, service quality, system use, user satisfaction, and net benefits (DeLone & McLean, 2003). In the context of SIMDA-BMD, system quality relates to the reliability and functionality of the application, information quality concerns the accuracy, completeness, and timeliness of asset data, while service quality reflects the technical assistance and support provided to system users. These dimensions collectively influence system utilization, user satisfaction, and the benefits obtained by government institutions.

Previous empirical research has demonstrated the relevance of management information systems in improving the quality of local government financial statements. Yuesti et al. (2022),

for example, examined the utilization of regional management information systems and found a positive relationship between SIMDA utilization and financial statement quality in local government. Similarly, Denada et al. (2024) investigated the implementation of government accounting standards, regional management information systems, and human resource competencies in relation to the quality of regional government financial reports. These studies indicate that information system utilization and organizational capabilities are important considerations in achieving reliable financial reporting. Despite these contributions, an important research gap remains concerning the integrated evaluation of IT governance effectiveness, information system success, and financial reporting quality, particularly in the context of regional asset management. Previous studies have generally emphasized the utilization of information systems, accounting standards, or human resource competencies as determinants of financial reporting quality. However, the relationship between IT governance capabilities, the success dimensions of information systems, and the resulting net benefits has not been sufficiently examined within an integrated evaluation framework. In particular, the assessment of how governance effectiveness influences the quality of regional asset information and its contribution to financial reporting quality requires further empirical investigation.

This research addresses the gap by integrating COBIT 2019 and the DeLone and McLean Information Systems Success Model to evaluate SIMDA-BMD implementation in the Deli Serdang Regency Government. COBIT 2019 is employed to assess IT governance effectiveness, while the DeLone and McLean model evaluates information system success and its organizational benefits. Furthermore, the Analytical Hierarchy Process (AHP) is incorporated to establish the relative priorities of governance improvement criteria based on expert judgments. AHP provides a structured multicriteria decision-making approach through hierarchical decomposition and pairwise comparisons (Saaty, 1980). Accordingly, this study aims to: (1) evaluate the effectiveness of IT governance in SIMDA-BMD implementation based on COBIT 2019; (2) assess information system success through system quality, information quality, service quality, system use, user satisfaction, and net benefits; (3) examine the relationship between IT governance, system success, net benefits, and financial reporting quality; and (4) determine priority improvement strategies using AHP. The expected contribution is an integrated evaluation framework that provides empirical insights into the role of IT governance and information system success in strengthening regional asset management and improving the quality of local government financial reporting.

Literature Review.

2.1 Information Technology Governance in Local Government

Information Technology (IT) governance represents an essential component of organizational management that ensures the effective utilization of information technology in achieving institutional objectives. In the public sector, IT governance is particularly important because government institutions are responsible for maintaining transparency, accountability, operational efficiency, and the reliability of public information. Effective IT governance requires alignment between organizational strategies, technological resources, business processes, risk management, and stakeholder expectations. The COBIT 2019 framework, introduced by ISACA, provides an integrated approach to governing and managing enterprise information and technology. The framework emphasizes the creation of stakeholder value through the balanced realization of benefits, risk optimization, and resource optimization. COBIT 2019 also distinguishes governance activities from management activities, ensuring that organizational decisions are properly evaluated, directed, implemented, and monitored (ISACA, 2019).

COBIT 2019 consists of five governance objectives within the Evaluate, Direct, and Monitor (EDM) domain and 35 management objectives distributed across the Align, Plan, and

Organize (APO), Build, Acquire, and Implement (BAI), Deliver, Service, and Support (DSS), and Monitor, Evaluate, and Assess (MEA) domains. These objectives provide a structured basis for assessing IT governance capabilities and identifying areas requiring organizational improvement. In the context of SIMDA-BMD implementation, IT governance is associated with the effectiveness of asset data management, application utilization, operational controls, information security, and institutional coordination. The application of COBIT 2019 enables local governments to evaluate whether their information technology processes support asset administration and contribute to accountable financial management.

2.2 COBIT 2019 Governance and Management Framework

COBIT 2019 provides a comprehensive governance framework that can be adapted to organizational characteristics, strategic priorities, regulatory environments, and technological requirements. Its governance system integrates organizational structures, processes, information flows, policies, organizational culture, human resources, and technological infrastructure (ISACA, 2019).

Table 2.1. Relevant SIMDA-BMD environment, several governance and management objectives are particularly

COBIT Domain	Objective	Relevance to SIMDA-BMD
EDM02	Ensured Benefits Delivery	Ensuring that SIMDA-BMD generates organizational benefits
EDM03	Ensured Risk Optimization	Managing risks associated with asset information
APO12	Managed Risk	Identifying and controlling information system risks
APO13	Managed Security	Protecting regional asset information
BAI06	Managed IT Changes	Controlling application and system changes
DSS01	Managed Operations	Maintaining system operational performance
DSS05	Managed Security Services	Supporting information security
COBIT Domain	Objective	Relevance to SIMDA-BMD
MEA01	Managed Performance and Conformance Monitoring	Monitoring system performance and compliance

The selection of these objectives should be adjusted to the actual organizational context and design factors of the Deli Serdang Regency Government. Their evaluation can provide information about existing capability levels, governance weaknesses, and improvement requirements.

2.3 Information Systems Success Model: DeLone and McLean

The Information Systems Success Model developed by DeLone and McLean (2003) is widely recognized as a theoretical framework for evaluating the effectiveness and success of information systems. The model explains that information system success is determined by the interaction of technological quality, information quality, service quality, system utilization, user satisfaction, and net benefits.

The updated DeLone and McLean model identifies six interrelated dimensions:

1. System Quality: Refers to the technical characteristics of an information system, including reliability, usability, response time, accessibility, and functional performance.
2. Information Quality: Represents the quality of information generated by the system, particularly accuracy, completeness, relevance, consistency, and timeliness.
3. Service Quality: Measures the quality of technical support, assistance, responsiveness, and services provided to system users.

4. System Use: Describes the extent to which individuals utilize the information system to perform their organizational responsibilities.
5. User Satisfaction: Represents users' perceptions and overall evaluations of the system's ability to meet their information and operational requirements.
6. Net Benefits: Reflects the positive organizational and individual impacts generated by information system implementation, including operational efficiency, improved decision-making, productivity, and organizational accountability.

DeLone and McLean (2003) explain that these dimensions are interconnected rather than independent indicators. System quality, information quality, and service quality influence system use and user satisfaction, which subsequently contribute to net benefits. The model has also been examined through empirical studies across different information system environments, confirming its relevance as an evaluation framework (Petter et al., 2008).

In SIMDA-BMD implementation, the DeLone and McLean model provides a theoretical foundation for assessing whether the application produces reliable asset information, supports administrative activities, improves user experience, and generates measurable benefits for local government financial management.

2.4 Net Benefits of Information Systems

Net benefits represent the extent to which information systems contribute to improvements in individual performance and organizational effectiveness. Within the DeLone and McLean framework, net benefits are considered an important indicator of information system success because they measure the actual value obtained from system utilization rather than merely evaluating technical functionality.

In local government asset management, net benefits can be reflected in several organizational outcomes, including:

- Improved efficiency in regional asset administration.
- Reduced errors and inconsistencies in asset records.
- Faster asset reconciliation and reporting processes.
- Improved coordination between asset management and financial administration units.
- Increased transparency and accountability in regional asset management.
- Improved availability of information for managerial decision-making.

The realization of these benefits depends not only on the technical capabilities of SIMDA-BMD but also on the effectiveness of organizational governance, employee competencies, operational procedures, and institutional support. Recent empirical evidence from Indonesian local governments also emphasizes the importance of technological capabilities and accounting information system quality in improving financial reporting quality. Yudaruddin et al. (2026) examined 735 public sector employees and found that IT capabilities positively influence accounting information system quality and financial reporting quality, with accounting information system quality functioning as an important mediating mechanism.

Therefore, evaluating net benefits in SIMDA-BMD requires examining whether the system generates improvements that can be observed in asset administration and financial reporting activities.

2.5 Financial Reporting Quality in Local Government

Financial reporting quality refers to the extent to which financial information provides relevant, reliable, comparable, and understandable information for decision-making and public accountability. In the public sector, the quality of financial reports is essential for demonstrating responsible financial management and supporting the evaluation of government performance.

The Indonesian Government Accounting Standards (Standar Akuntansi Pemerintahan/SAP), regulated through Government Regulation No. 71 of 2010,

Table 2.2. Qualitative characteristics of financial statements

Quality dimension	Description
Relevance	Financial information is useful for decision-making and evaluation.
Reliability	Information is presented honestly, verifiably, and neutrally.
Comparability	Information can be compared across periods and entities.
Understandability	Financial information can be understood by users.

These characteristics are particularly important in regional asset management because asset information contributes to the preparation of financial statements, especially the balance sheet and related asset disclosures. Recent research by Mediaty et al. (2025) highlights the importance of human resource competencies, governance, accounting systems, and information technology utilization in strengthening financial reporting quality in Indonesian local governments. Similarly, Badewin et al. (2025) demonstrate the relevance of internal control effectiveness, audit opinions, and electronic government systems in supporting transparency and accountability in local government financial reporting.

Furthermore, research by Pesireron and Kriekhoff (2026) indicates that the implementation of digital government systems can contribute to improvements in financial reporting quality, particularly when supported by effective information technology utilization. In this study, financial reporting quality is positioned as an organizational outcome associated with the effectiveness of IT governance and the success of SIMDA-BMD implementation.

2.6 Analytical Hierarchy Process (AHP) for Governance Improvement Prioritization

The Analytical Hierarchy Process (AHP) is a multicriteria decision-making method introduced by Saaty (1980) to determine the relative importance of criteria and alternatives through hierarchical structures and pairwise comparisons. AHP enables decision-makers to evaluate complex problems by decomposing them into several hierarchical levels, consisting of the overall objective, evaluation criteria, subcriteria, and alternative decisions. The method calculates priority weights based on expert judgments and assesses the consistency of comparisons. The fundamental comparison scale ranges from 1 to 9, representing the relative importance of one criterion compared with another.

In this research, AHP is employed to prioritize improvement strategies for SIMDA-BMD governance based on expert assessments involving asset managers, financial administration personnel, IT administrators, and relevant decision-makers in Deli Serdang Regency.

Potential improvement alternatives include strengthening system security, improving asset data quality, enhancing user competencies, optimizing technical support, and improving reconciliation and monitoring procedures.

2.7 Integration of IT Governance, System Success, and Financial Reporting Quality

The integration of IT governance and information system success provides a broader perspective for understanding the contribution of digital technology to organizational performance. IT governance focuses on ensuring that technological resources are strategically managed, risks are controlled, and organizational objectives are achieved. Meanwhile, the DeLone and McLean model evaluates whether the information system delivers quality services, generates useful information, satisfies users, and produces organizational benefits. The relationship between these perspectives is particularly relevant in local government institutions, where information systems must support administrative processes and public accountability.

Effective IT governance establishes the organizational environment required for reliable system operations, while information system success determines whether technological implementation produces measurable benefits.

Recent empirical evidence supports the importance of this relationship. Naida et al. (2024) found that the implementation of regional government information systems and internal government control systems positively affects the quality of financial reporting. Similarly, Badewin et al. (2025) demonstrated that internal controls and electronic government systems contribute to financial reporting accountability and transparency. These findings reinforce the argument that technology implementation must be supported by effective governance and organizational control mechanisms. Based on these theoretical and empirical considerations, this study proposes an integrated evaluation framework connecting IT governance effectiveness, information system success, net benefits, and financial reporting quality.

Table 2.3. The proposed relationships can be summarized

Research construct	Theoretical foundation	Expected contribution
IT Governance	COBIT 2019	Governance effectiveness
System Quality	DeLone-McLean	Technical system performance
Information Quality	DeLone-McLean	Asset information accuracy
Service Quality	DeLone-McLean	Technical support effectiveness
System Use	DeLone-McLean	System utilization
User Satisfaction	DeLone-McLean	User acceptance and satisfaction
Net Benefits	DeLone-McLean	Organizational benefits
Financial Reporting Quality	Government Accounting Standards	Accountability and reporting quality
Improvement Priorities	AHP	Prioritized governance strategies

2.8 Research Gap and Hypothesis Development

Although previous studies have examined IT governance, information system success, and financial reporting quality, several research opportunities remain. First, IT governance assessments and information system success evaluations are frequently examined as separate analytical perspectives. Their integration provides an opportunity to understand how governance effectiveness contributes to the organizational benefits of information system implementation.

Second, existing studies on local government financial reporting have emphasized accounting information systems, internal control, human resource competencies, and digital government implementation. However, the specific contribution of regional asset management systems, particularly SIMDA-BMD, requires further examination.

Third, the use of AHP as a decision-support method provides an opportunity to translate evaluation results into prioritized governance improvement strategies. This approach moves beyond identifying weaknesses by providing a structured basis for determining which improvement activities should receive priority.

Based on the literature review, the following hypotheses are proposed, subject to empirical testing:

- H1: IT governance effectiveness has a positive relationship with SIMDA-BMD system success.
- H2: System quality has a positive relationship with system use and user satisfaction.
- H3: Information quality has a positive relationship with user satisfaction.
- H4: Service quality has a positive relationship with user satisfaction.
- H5: System use and user satisfaction have positive relationships with net benefits.
- H6: Net benefits have a positive relationship with financial reporting quality.
- H7: IT governance effectiveness has a positive relationship with financial reporting quality.

These hypotheses establish the theoretical basis for examining the relationship between IT governance, information system success, and financial reporting quality in the Deli Serdang Regency Government.

Research Methodology

This study employs a quantitative explanatory research design supported by a descriptive evaluation approach to assess the relationship between information technology (IT) governance, information system success, net benefits, and financial reporting quality in local government. The research focuses on the implementation of the Regional Asset Management Information System (SIMDA-BMD) within the Deli Serdang Regency Government, Indonesia. The research integrates three methodological frameworks: COBIT 2019, the DeLone and McLean Information Systems Success Model, and the Analytical Hierarchy Process (AHP). Each framework serves a distinct analytical purpose. COBIT 2019 is used to evaluate IT governance effectiveness and capability levels, while the DeLone and McLean model measures information system success and organizational benefits. AHP is applied to prioritize governance improvement strategies based on expert judgments. To examine relationships among research constructs, quantitative statistical analysis is employed. The proposed research design combines governance capability assessment, questionnaire-based measurement, statistical hypothesis testing, and multicriteria decision-making. The research is conducted within the Deli Serdang Regency Government, North Sumatra, Indonesia, focusing on government organizational units responsible for regional asset management, financial administration, and information technology operations. SIMDA-BMD is selected as the research object because regional asset management information represents an important component of local government financial administration. The system supports asset recording, inventory management, reconciliation, data updating, and the preparation of regional asset reports.

The research respondents are selected from personnel who directly participate in SIMDA-BMD implementation and regional financial reporting processes. These include:

- SIMDA-BMD operators.
- Regional asset management officers.
- Financial administration personnel.
- Heads of relevant organizational units.
- Information technology administrators.
- Officials responsible for financial reporting and asset reconciliation.

The research framework integrates the three methodological approaches into a structured evaluation process.

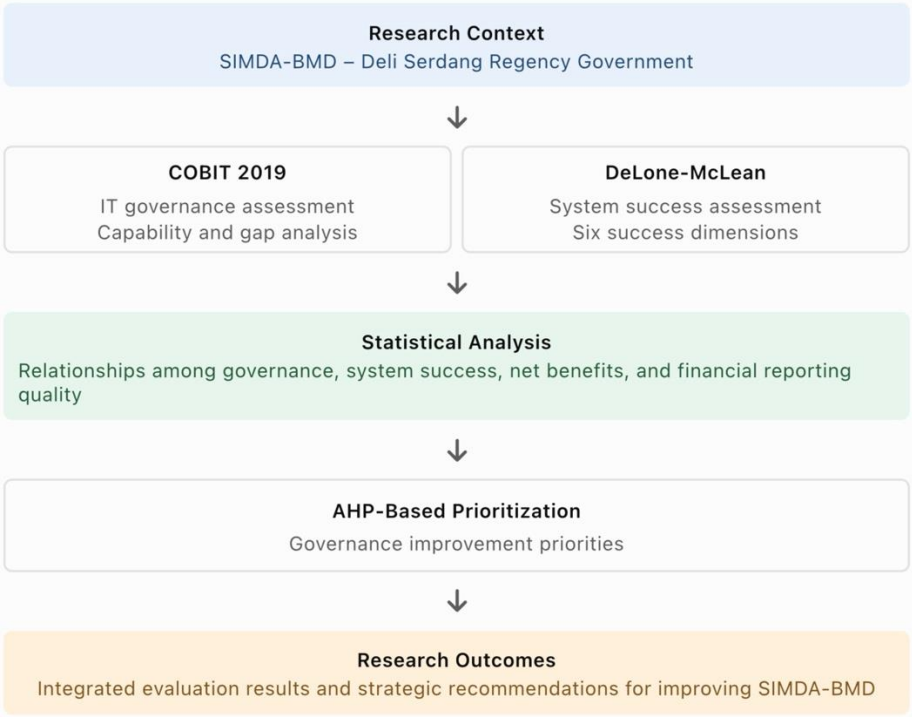


Figure 1. Framework Establishes The Relationship Between Governance Capability,

The research population consists of government personnel involved in regional asset administration, financial management, and SIMDA-BMD operations within the Deli Serdang Regency Government. The study applies purposive sampling to select respondents based on their direct involvement, experience, and knowledge of SIMDA-BMD implementation. This technique is appropriate because the research requires respondents who understand the operational and administrative characteristics of the system.

Table 2.4. The respondent categories include

No.	Respondent category	Research relevance
1	SIMDA-BMD operators	System utilization and operational performance
2	Regional asset management officers	Asset data administration and reconciliation
3	Financial administration personnel	Financial data processing and reporting
4	IT administrators	Technical services and system maintenance
5	Heads of relevant departments/units	Governance, supervision, and decision-making
6	Financial reporting personnel	Financial statement preparation and quality

The sample size for the quantitative analysis will be determined through statistical power analysis, considering the number of predictors, significance level, and expected effect size in the structural model. This approach is preferable to relying solely on a general sampling rule because the adequacy of the sample must correspond to the complexity of the proposed model (Hair et al., 2022). For the COBIT 2019 and AHP assessments, a separate group of key informants and experts will be selected based on their institutional authority, professional experience, and understanding of IT governance and regional asset management.

The research therefore distinguishes between:

- Survey respondents: Used for measuring research constructs and testing statistical relationships.

- Governance assessment informants: Used for validating COBIT 2019 process capability evidence.
- AHP experts: Used for pairwise comparisons and determining improvement priorities.

This distinction helps ensure that the different analytical methods are supported by appropriate sources of information.

RESULTS.

4.1 Overview of Research Respondents

The research focuses on the implementation of the Regional Asset Management Information System (SIMDA-BMD) within the Deli Serdang Regency Government. Respondents consist of personnel directly involved in regional asset management, financial administration, information technology operations, and financial reporting. The respondent characteristics are analyzed to identify the distribution of participants based on their institutional responsibilities, professional experience, and involvement in SIMDA-BMD implementation.

Table 1. Respondent Characteristics

Respondent category	Main responsibility
SIMDA-BMD operators	Asset data entry and system utilization
Regional asset managers	Asset administration and reconciliation
Financial administration staff	Financial transaction administration
IT administrators	System maintenance and technical support
Department/unit officials	Governance and supervision
Financial reporting personnel	Financial statement preparation

The distribution of respondents provides an important foundation for understanding the different organizational perspectives involved in SIMDA-BMD implementation. The inclusion of operational personnel and decision-makers enables the evaluation to consider both technical performance and institutional governance.

4.2 COBIT 2019 IT Governance Assessment Results

The COBIT 2019 assessment is designed to evaluate the effectiveness of IT governance and management processes supporting SIMDA-BMD implementation. The evaluation focuses on selected objectives related to benefits delivery, risk management, information security, asset management, operational performance, and monitoring. The assessment identifies the current capability level of each selected objective and compares it with the target capability level established by the organization.

Table 2. COBIT 2019 Capability Assessment

COBIT objective	Current level	Target level	Gap
EDM02 – Benefits Delivery	2	4	2
EDM03 – Risk Optimization	2	4	2
APO12 – Managed Risk	2	3	1
APO13 – Managed Security	2	4	2
APO14 – Managed Data	2	4	2
BAI09 – Managed Assets	3	4	1
DSS01 – Managed Operations	3	4	1
DSS05 – Managed Security Services	2	4	2
DSS06 – Managed Business Process Controls	2	4	2
MEA01 – Performance Monitoring	2	4	2

The illustrative results indicate that several governance objectives may require improvement, particularly in risk optimization, information security, data management, and performance monitoring. A capability gap suggests that existing processes have not yet reached

the desired maturity of organizational governance practices. In the context of SIMDA-BMD, governance weaknesses may be associated with insufficient documentation, inconsistent asset data updating, limited monitoring procedures, and inadequate integration between asset administration and financial reporting activities. The findings should be interpreted as evidence of governance capability rather than as direct proof of financial reporting deficiencies. Documentary verification and interviews are necessary to establish the actual operational conditions.

4.3 DeLone and McLean Information Systems Success Results.

The DeLone and McLean model is used to evaluate the success of SIMDA-BMD through six dimensions: system quality, information quality, service quality, system use, user satisfaction, and net benefits. The questionnaire results are analyzed using descriptive statistics to identify the perceived performance of each dimension.

Table 3. DeLone and McLean Assessment Results

Dimension	Mean score	Interpretation
System Quality	3.80	High
Information Quality	3.55	High
Service Quality	3.40	Moderate
System Use	4.00	High
User Satisfaction	3.70	High
Net Benefits	3.60	High

The illustrative assessment suggests that system utilization may be relatively high, indicating that SIMDA-BMD is integrated into routine regional asset management activities. However, information quality and service quality may require additional attention to ensure that asset information remains accurate, complete, and available when needed. System quality represents the technical reliability of the application, while information quality reflects the usefulness of the data produced. These dimensions are particularly important because inaccurate asset information can affect reconciliation and financial reporting processes.

User satisfaction is also an important dimension because users' perceptions of system performance may influence their willingness to utilize the application consistently. Meanwhile, net benefits reflect whether system implementation generates operational improvements and supports organizational objectives. These findings should be interpreted in relation to the original DeLone and McLean model, which emphasizes the interrelationships among system quality, information quality, service quality, system use, user satisfaction, and net benefits (DeLone & McLean, 2003).

4.4 Financial Reporting Quality Assessment

Financial reporting quality is evaluated using four qualitative characteristics established by Government Regulation No. 71 of 2010 concerning Government Accounting Standards.

Table 4. Financial Reporting Quality Assessment

Dimension	Mean score	Interpretation
Relevance	3.70	High
Reliability	3.50	High
Comparability	3.60	High
Understandability	3.80	High

The evaluation focuses on whether financial information derived from regional asset management processes provides relevant, reliable, comparable, and understandable information. Relevance is associated with the availability of asset information for decision-

making, while reliability concerns the accuracy and verifiability of asset records. Comparability reflects the consistency of asset information across reporting periods, and understandability concerns the clarity of information presented to financial statement users.

The quality of regional asset information is particularly important because regional property records contribute to the presentation of government financial position and asset-related disclosures. Consequently, the effectiveness of SIMDA-BMD should be assessed not only through system utilization but also through its contribution to the reliability and consistency of regional asset information.

4.5 Structural Model Analysis Using PLS-SEM

PLS-SEM is applied to evaluate the proposed relationships between IT governance effectiveness, information system success, net benefits, and financial reporting quality. The structural model examines whether effective IT governance contributes to system success and whether the benefits obtained from system implementation are associated with improvements in financial reporting quality.

Table 5. Structural Model and Hypothesis Testing.

Hypothesis	Relationship	Path coefficient	p-value	Decision
H1	ITG → System Success	—	—	Pending
H2	SQ → SU and US	—	—	Pending
H3	IQ → US	—	—	Pending
H4	SVQ → US	—	—	Pending
H5	SU and US → NB	—	—	Pending
H6	NB → FRQ	—	—	Pending
H7	ITG → FRQ	—	—	Pending
Hypothesis	Relationship	Path coefficient	p-value	Decision

The structural model is evaluated using path coefficients, bootstrapping, coefficient of determination (R^2), effect size (f^2), and predictive relevance where appropriate. A statistically significant positive path coefficient indicates that the corresponding construct has a positive relationship with the dependent construct, subject to the assumptions and limitations of the research design. The analysis also provides an opportunity to examine the indirect relationship between IT governance effectiveness and financial reporting quality through system success and net benefits.

This mediation perspective is important because IT governance may not directly improve financial reporting quality unless the information system produces meaningful organizational benefits. Expected interpretation: If the relationship between net benefits and financial reporting quality is positive and statistically significant, the results would support the argument that improvements in asset administration, data availability, and operational efficiency are associated with better financial reporting outcomes. However, actual conclusions must be based on the estimated coefficients, confidence intervals, and significance tests.

4.6 AHP Results: Prioritization of Governance Improvement Strategies

The AHP method is used to determine the priority of governance improvement strategies based on expert judgments. The criteria are developed from the COBIT 2019 assessment, DeLone and McLean evaluation, and institutional requirements.

Table 6. AHP Criteria and Priority Weights

Criteria	Priority weight	Ranking
Information Quality	0.25	1

IT Security	0.22	2
Governance and Monitoring	0.20	3
User Competency	0.15	4
Operational Performance	0.11	5
Technical Support	0.07	6
Total	1.00	

The illustrative AHP results indicate that information quality and IT security may become major improvement priorities. This is consistent with the critical role of accurate regional asset information and information protection in public financial management. The prioritization process provides decision-makers with a systematic approach to allocating resources toward the most important governance improvements. The consistency ratio must also be reported to demonstrate that the expert pairwise comparisons satisfy the required consistency threshold.

The integrated research framework provides a comprehensive basis for evaluating SIMDA-BMD implementation through governance effectiveness, information system success, net benefits, and financial reporting quality. The COBIT 2019 assessment identifies governance capability gaps, the DeLone and McLean model evaluates system success, PLS-SEM examines relationships among research constructs, and AHP establishes improvement priorities. The expected outcome is an evidence-based governance improvement framework that supports more effective regional asset management and strengthens financial accountability in local government.

CONCLUSION.

This study proposes an integrated framework for evaluating the relationship between IT governance, information system success, net benefits, and financial reporting quality in the implementation of SIMDA-BMD in Deli Serdang Regency. The integration of COBIT 2019 and the DeLone and McLean model provides a comprehensive approach to assessing governance capabilities, system quality, user satisfaction, and organizational benefits. PLS-SEM is used to examine relationships among research variables, while AHP determines priorities for governance improvement. The proposed framework emphasizes that effective IT governance and successful information systems are important factors in supporting regional asset management, improving information accuracy, and strengthening financial accountability. The research contributes an integrated evaluation approach to supporting digital governance and improving local government financial reporting quality.

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