

The Role of Information System Effectiveness in Strengthening Financial Management and Performance Evaluation

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ABSTRACT

Digitalization in the public sector has led to higher demands for transparency, accountability, and accurate reporting. However, many organizations still face obstacles such as unsynchronised data, slow reporting processes, and performance evaluations that are not fully evidence-based. These conditions indicate that the effectiveness of information systems is urgently required to strengthen organizational governance and performance. This study analyzes the influence of information system effectiveness on financial governance and performance evaluation in regional apparatus organizations (OPD) within the local government. This study uses a quantitative approach with an explanatory research design. The research population consisted of OPD employees involved in the use of information systems, financial management, and/or performance evaluation. Purposive sampling was used, with a sample size of 120 respondents. Data were collected using questionnaires from November to December 2025. Data analysis was performed using PLS-SEM with SmartPLS through measurement and structural model evaluation. The results showed that information system effectiveness had a positive effect on strengthening financial governance and improving performance evaluation. These findings confirm that an effective information system not only serves an administrative function but also becomes a strategic factor in ensuring more transparent financial management and more objective performance assessment. The implications of this study encourage OPDs to prioritize improving system quality, data integration, and information utilization as a basis for performance control and evaluation.

Keywords: *information system effectiveness, financial governance, performance evaluation, OPD, PLS-SEM.*

INTRODUCTION

The development of digitalization in the public sector means that financial management and performance evaluation can no longer rely on manual processes or scattered data. In many agencies, problems such as delayed reports, unsynchronized data between units, and difficulty tracing transaction evidence still occur frequently, resulting in weak transparency and accountability. An effective information system should be able to provide accurate and timely data to strengthen control, accelerate decisionmaking, and close gaps in errors and irregularities. Several studies show that the integration of government financial management systems (e.g., IFMIS/GIFMIS) is associated with increased accountability and quality of governance because data are more standardized and easier to audit (Attigbo et al., 2025; Tetteh et al., 2021). Therefore, this research needs to be conducted immediately so that the effectiveness of the information systems used by organizations does not stop at being "mere applications" but truly becomes a tool for strengthening governance and performance (Syafuddin, 2023).

The objective of this study is to focus on regional public sector organizations (Regional Apparatus Organisations/OPDs) because OPDs are at the most strategic point in the budget management cycle: planning, implementation, recording, reporting, and accountability. Unlike similar organizations in the private sector, which are more flexible in their reporting standards, OPDs face strict regulatory, audit, and agency performance assessment requirements. This condition means that the quality of financial governance and performance evaluation is greatly influenced by how effectively the information system supports daily work processes, and not just at the time of final reporting. Furthermore, a national study in the context of local governments shows that improving governance requires not only regulations but also the support of

systems and control practices that are implemented in the field (Pereira & Akbar, 2025).

This study uses three main variables, namely Information System Effectiveness (ISE), Financial Governance (FG), and Performance Evaluation (PE). In short, an effective information system will produce quality information (accurate, complete, relevant, and timely) and facilitate the control and tracking processes. Financial governance becomes more transparent and accountable when financial data become accessible and traceable. At the same time, neat and real-time data also make performance evaluation more objective because performance indicators and program achievements can be monitored consistently. This logic is in line with the information system success model, which emphasizes system quality and information quality as the basis for the emergence of net benefits for organizations (DeLone & McLean, 2003; Petter et al., 2008).

However, there is still a gap in research. Research related to IFMIS/GIFMIS in various countries more often emphasizes its impact on accountability or transparency in financial management, but few studies have examined its relationship with organizational performance evaluation in an integrated model (Attigbo et al., 2025; Tetteh et al., 2021). On the other hand, research on government technology shows that technology can promote transparency in public processes, for example, through e-procurement systems, but the focus is often on the policy and index levels, rather than on the operational relationships between variables in work units (Khorana et al., 2024). Furthermore, in PLS-SEM-based research, there are still studies that are not rigorous in ensuring discriminant validity and model reporting, even though it is important to ensure that the constructs are truly different and the model results are reliable (Henseler et al., 2015; Hair et al., 2019).

Based on these gaps, the novelty of this study lies in the development of a more comprehensive model, testing the effect of information system effectiveness on financial management and performance evaluation simultaneously in the context of OPDs, with measurement and structural model testing reported strictly in accordance with PLS-SEM guidelines. The practical benefit is that it provides a basis for recommendations for system improvements (data quality, integration, control procedures, and reporting) so that financial management is stronger and performance evaluation is more objective. The academic benefit is to enrich the public sector literature, which has tended to separate the discussion on information systems, financial management, and performance evaluation. The objectives of this study are: (1) to analyze the effect of information system effectiveness on financial governance, (2) to analyze the effect of information system effectiveness on performance evaluation, and (3) to explain the strategic role of effective information systems as a measurable enhancer of governance and organizational performance.

LITERATURE REVIEW

Information System Effectiveness

The effectiveness of an information system indicates its ability to provide accurate, relevant, complete, accessible, and timely information to support organizational work processes and decision-making (DeLone & McLean, 2003). In the public sector, the effectiveness of information systems is not only measured by the existence of applications but also by the extent to which the system is actually used and provides tangible benefits in the form of improved reporting quality, internal control, and data-based decision making (Petter et al., 2008).

The information system success model developed by DeLone and McLean places system quality and information quality as the main factors influencing user utilization and satisfaction, which ultimately results in net benefits for the organization (DeLone & McLean, 2003). Empirical research in the public sector shows that effective accounting information systems contribute to increased operational efficiency and support the achievement of sustainable performance when they are integrated with the organization's managerial processes (Pham & Vu, 2020). Thus, the effectiveness of information systems is an important foundation for strengthening governance and evaluating the performance of public organizations.

Financial Governance

Financial governance refers to how organizations manage financial resources in a transparent, accountable, and compliant manner supported by adequate internal controls (Adiputra et al., 2018). In public sector organizations, good financial governance is a key prerequisite for maintaining public trust and ensuring that budget utilization is aligned with development objectives.

The implementation of integrated financial management systems such as IFMIS and GIFMIS has been shown to be associated with increased transparency and accountability because financial data are recorded systematically, are easily traceable, and can be audited (Attigbo et al., 2025). In Indonesia, the quality of local government financial reporting has also been shown to influence the level of transparency and accountability, indicating that financial management is highly dependent on the quality of the information

produced by the system (Adiputra et al., 2018). Therefore, financial management cannot be separated from the role of an effective information system as the primary support for the financial management process.

Performance Evaluation

Performance evaluation is a systematic process for assessing organizational achievement based on measurable indicators to ensure the effectiveness of program implementation and continuous improvement (Moullin, 2017). In the public sector, performance evaluation assesses not only outputs, but also outcomes and the impact of services on the community.

Approaches such as the Public Sector Scorecard emphasize the importance of the relationship between strategy, performance measurement, and service improvement, all of which require accurate and consistent performance data (Moullin, 2017). A literature study on balanced scorecards in government entities showed that the success of a performance evaluation system is greatly influenced by the readiness of the information system and the quality of the data used in the measurement (Barros, 2025). In addition, the use of digital data and modern information systems further strengthens the objectivity and reliability of public organization performance evaluations (Bisogno et al., 2025).

Hypothesis Development

The Influence of Information System Effectiveness on Financial Management

Theoretically, the effectiveness of information systems plays an important role in strengthening financial governance by improving the quality of financial recording, reporting, and control. Effective information systems enable financial data to be recorded in real time, in a standardized manner, and in a way that is easy to trace, thereby supporting organizational transparency and accountability (DeLone and McLean 2003).

Research in the public sector shows that the implementation of integrated financial systems is associated with increased accountability and quality of financial governance, because these systems provide a clear audit trail and strengthen internal controls (Attigbo et al., 2025). In addition, good information technology governance has also been shown to strengthen the accountability and financial transparency of local governments (Sofyani et al., 2020). Thus, the more effective the information system used by an organization, the stronger the financial governance produced.

H1: IS effectiveness of information systems has a positive and significant effect on financial governance.

The Influence of Information System Effectiveness on Performance Evaluation

A quality performance evaluation requires accurate, consistent, and timely data. An effective information system supports the process of collecting, processing, and reporting performance data on an ongoing basis so that performance evaluation can be carried out objectively and based on evidence (Petter et al., 2008).

The information system success model explains that the net benefits of the system are reflected in improved decision quality and organizational performance (DeLone & McLean, 2003). In the public sector, the use of performance measurement systems, such as the Public Sector Scorecard, has proven to be more effective when supported by information systems capable of providing valid performance data (Moullin, 2017). Empirical research also shows that the effectiveness of accounting information systems has a positive effect on the sustainable performance of public organizations (Pham & Vu, 2020). Therefore, the effectiveness of information systems is expected to play an important role in improving the quality of performance evaluation.

H2: The effectiveness of information systems has a positive and significant effect on performance evaluations.

METHODOLOGY

This study was a quantitative study with an explanatory design. This design was used because the study focused on testing the influence between variables, namely, Information System Effectiveness on Financial Management and Performance Evaluation, through predetermined hypotheses. A quantitative approach was chosen so that the relationship between constructs could be measured objectively and tested statistically, and conclusions were produced based on empirical data (Hair et al., 2019).

Research Location and Time

The object of this study is regional apparatus organizations (OPD) within the local government. OPDs were chosen because they play a direct role in program and budget management, report preparation, and performance evaluation implementation, thereby requiring an effective information system to support the accuracy and precision of the process. The research was conducted from November to December 2025,

covering the preparation of the instruments, distribution of questionnaires, data collection, and initial data processing.

Research Variables

This study involved three main variables: (1) Information System Effectiveness (ISE) as an independent variable, (2) Financial Governance (FG) as a dependent variable, and (3) Performance Evaluation (PE) as a dependent variable. All variables are modelled as reflective constructs so that the indicators are seen as representations of the measured latent variables (Hair et al., 2019).

Operational Definition of Variables

To ensure consistent and replicable measurements, the operational definitions of the variables are set as follows:

1. Information System Effectiveness (ISE)
Information system effectiveness is defined as the ability of the system to provide quality information (accurate, relevant, complete, and timely) that is easy to use and beneficial to the organization in supporting work processes. This definition refers to the framework of information system success, which emphasizes system quality, information quality, and organizational benefits (DeLone & McLean, 2003; Petter et al., 2008).
2. Financial Governance (FG)
Financial governance is defined as the condition of an organization's financial management, which reflects transparency, accountability, compliance, accuracy of reporting, and effectiveness of internal controls.
3. Performance Evaluation (PE)
Performance evaluation is defined as the process of periodically measuring and assessing organizational achievements using clear indicators, reliable data, and timely reporting as the basis for continuous improvement.

Types of Data and Data Sources

This study used quantitative data sourced from primary data. Primary data were obtained from respondents through questionnaires because this method was considered effective in capturing the perceptions and experiences of information system users in the practice of financial management and performance evaluation in OPDs.

Population and Sampling Technique

The research population consisted of OPD employees involved in the use of information systems and the implementation of financial management and/or performance evaluation activities. Sampling was conducted using purposive sampling, namely, the determination of respondents based on criteria in line with the research objectives so that the data obtained were truly relevant.

The criteria for respondents are:

1. employees who use financial/performance-related information systems in their work,
2. employees involved in financial reporting/control and/or performance evaluation, and
3. have a minimum of one year of service so that they understand the work procedures and system flow in their unit.

The sample size was determined by considering the feasibility of the PLS-SEM analysis. In PLS-SEM, sample adequacy is assessed based on the ability of the model to be estimated stably and adequately according to model evaluation guidelines (Hair et al., 2019). Therefore, the sample size in this study was set to 120 respondents, which was considered to meet the sample adequacy requirements for PLS-SEM analysis.

Research Instruments and Measurement Scales

The research instrument used was a structured questionnaire compiled based on the indicators of each variable (ISE, FG, and PE). The measurement used a 5-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The questionnaire was distributed directly and/or online, from November to December 2025. To maintain data quality, the questionnaire was given only to respondents who met the purposive sampling criteria.

Data Analysis Techniques

Data analysis used partial least squares-based structural equation Modelling (PLS-SEM) with the assistance of the SmartPLS software. PLS-SEM was chosen because it is suitable for testing relationships between constructs, predictive, and flexible with regard to the characteristics of field research data (Hair et al., 2019). The analysis was conducted in two main stages: the evaluation of the measurement model (outer model) and the evaluation of the structural model (inner model).

Measurement Model Evaluation (Outer Model)

An outer model evaluation was conducted to ensure the quality of the indicators and constructs, including

1. Convergent validity, assessed from *outer loading* values with criteria ≥ 0.70 ;
2. Discriminant validity was tested using the Fornell–Larcker and/or HTMT criteria when necessary (Henseler et al., 2015);
3. Construct reliability, assessed through composite reliability ≥ 0.70 and AVE ≥ 0.50 (Hair et al., 2019).

Structural Model Evaluation (Inner Model)

An inner model evaluation was conducted to assess the strength of the relationship between variables and the predictive ability of the model as follows:

1. R-squared (R^2) on the dependent variable to determine the proportion of variation explained by the model.
2. path coefficients to see the direction and strength of the influence;
3. significance testing using a bootstrapping procedure based on *t-statistic* and *p-value* (Hair et al., 2019).
Decision criteria: Relationships were considered significant if the p-value was < 0.05 .

Hypothesis Testing

Hypotheses were tested based on path coefficients (β), *t-statistic* values, and *p-values* from bootstrapping using SmartPLS. The decision to accept or reject a hypothesis was determined based on the direction of the coefficient and the statistical significance.

Effect Size Test (f^2)

In addition to significance, this study also measured the effect size (f^2) to determine the contribution of the independent variables to the predictive ability of the dependent variables. The interpretation of f^2 refers to PLS-SEM guidelines, namely, small, medium, and large effects (Hair et al., 2019).

RESEARCH RESULTS AND DISCUSSION**Respondent Characteristics**

This subsection presents the characteristics of the research respondents, who were the source of data in the analysis. The presentation of respondent characteristics aims to provide an overview of the respondents' backgrounds and to ensure that the respondents involved are relevant to the research topic, namely the use of information systems, financial management, and performance evaluation in regional apparatus organizations (OPD).

Table 1. Respondent Characteristics

| Characteristics | Category | Frequency (n) | Percentage |
|----------------------------|-------------------------------|---------------|------------|
| Gender | Male | 68 | 56.7 |
| | Female | 52 | 43.3 |
| Age | ≤ 25 years | 14 | 11.7 |
| | 26–35 years | 42 | 35.0 |
| | 36–45 years | 39 | 32.5 |
| | ≥ 46 years | 25 | 20.8 |
| Highest level of education | High school/vocational school | 18 | 15 |
| | D3 | 20 | 16.7 |
| | Bachelor's Degree | 64 | 53.3 |
| | Master's/Doctorate | 18 | 15 |
| Years of service | < 3 years | 16 | 13.3 |
| | 3–5 years | 28 | 23.3 |
| | 6–10 years | 37 | 30.8 |
| | > 10 years | 39 | 32.6 |
| Position/Role | Staff/Executive | 63 | 52.5 |
| | Functional Officer | 34 | 28.3 |

| | | | |
|------------------|-----------------------|----|------|
| Work involvement | Structural officials | 23 | 19.2 |
| | Finance/accounting | 46 | 38 |
| | Planning/performance | 32 | 26.7 |
| | Finance & performance | 42 | 35.0 |

Based on Table 1, the research respondents were predominantly employees with backgrounds relevant to information system management, finance, and performance evaluation in OPD. Most respondents were in the productive age group and had a bachelor's degree, indicating an adequate understanding of the use of information systems and organizational work procedures. In terms of length of service, the majority of respondents had worked for more than five years; therefore, they were considered to have sufficient experience in understanding financial management and performance evaluation mechanisms. In addition, the variety of positions and work involvement of the respondents indicates that the data were obtained from various interconnected functions, thus representing the operational conditions of the OPD more comprehensively. Thus, the characteristics of the respondents support the suitability of the data for analyzing the role of information system effectiveness in strengthening financial management and performance evaluation.

Data Analysis

Assessing the Outer Model or Measurement Model

In data analysis using SmartPLS, the outer model was assessed using three main criteria: convergent validity, discriminant validity, and composite reliability. Convergent validity ensures that indicators are able to explain the construct well, discriminant validity confirms the differences between constructs so that they do not overlap, and composite reliability measures the consistency of indicators in representing latent variables. These three criteria are important for ensuring the validity and reliability of the research model before testing the hypotheses.

Convergent Validity

Convergent validity in measurement models with reflective indicators is assessed based on the strength of the correlation between item or component scores estimated using PLS software and the measured construct. A reflective indicator was considered to have good convergent validity if its correlation value exceeded 0.70. This value indicates that the indicator can adequately explain the construct because its contribution is strong and consistent in reflecting the latent variable.

Table 2. *Outer Loadings (Measurement Model)*

| | Financial (FG) | Governance | Information Effectiveness (ISE) | System Performance (PE) | Evaluation |
|------|-------------------|------------|------------------------------------|-------------------------------|------------|
| FG1 | 0.729 | | | | |
| FG2 | 0.801 | | | | |
| FG3 | 0.766 | | | | |
| FG4 | 0.722 | | | | |
| FG5 | 0.713 | | | | |
| FG6 | 0.709 | | | | |
| ISE1 | | | 0.795 | | |
| ISE2 | | | 0.801 | | |
| ISE3 | | | 0.715 | | |
| ISE4 | | | 0.727 | | |
| ISE5 | | | 0.711 | | |
| ISE6 | | | 0.715 | | |
| PE1 | | | | 0.769 | |
| PE2 | | | | 0.748 | |
| PE3 | | | | 0.757 | |
| PE4 | | | | 0.748 | |
| PE5 | | | | 0.730 | |
| PE6 | | | | 0.715 | |

Based on the results of the analysis using SmartPLS in Table 2, it was found that the outer model value, namely the correlation between the construct and its indicators, met the convergent validity requirements. This was indicated by all indicators with a loading factor value greater than 0.70. Thus, this research model

can be declared convergent valid because each indicator can describe the construct being measured consistently and adequately.

Discriminant Validity

Discriminant validity aims to ensure that each construct in the latent variable truly has clear differences and does not overlap with the other constructs. A model can be said to meet the criteria for discriminant validity if each indicator shows the highest loading value on the measured latent variable compared to the loading on other latent variables. In other words, indicators must be better able to represent their own constructs than others. The results of the discriminant validity test in this study were as follows.

Table 3. Discriminant Validity Values (*Fornell-Larcker*)

| | Financial Governance (FG) | Information System Effectiveness (ISE) | Performance Evaluation (PE) |
|--|---------------------------------|---|--------------------------------|
| Financial Governance (FG) | 0.741 | | |
| Information System Effectiveness (ISE) | 0.847 | 0.745 | |
| Performance Evaluation (PE) | 0.835 | 0.887 | 0.745 |

Composite Reliability.

The validity and reliability of the construct can be evaluated by examining the construct reliability value and Average Variance Extracted (AVE) value for each latent variable. A construct is considered reliable if its reliability value reaches at least 0.70, while an AVE value above 0.50 indicates that the indicator is able to explain most of the variance of the measured construct. Therefore, meeting both criteria indicated that the construct had good internal consistency and strong validity.

Table 4. *Composite Reliability* Values

| | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average Variance Extracted (AVE) |
|--|---------------------|-------------------------------------|-------------------------------------|---|
| Financial Governance (FG) | 0.835 | 0.836 | 0.879 | 0.549 |
| Information System Effectiveness (ISE) | 0.839 | 0.843 | 0.882 | 0.555 |
| Performance Evaluation (PE) | 0.840 | 0.840 | 0.882 | 0.555 |

Referring to Table 4, it can be concluded that all constructs in this study met reliability requirements. This is indicated by a composite reliability value above 0.70 and an AVE value exceeding 0.50, in accordance with the recommended criteria. Thus, the research instrument used was considered consistent and capable of accurately and adequately describing the latent variables.

Structural Model Testing (Inner Model)

Inner model or structural model testing was conducted to assess the interrelationships between constructs, the level of significance, and the R-square value in the research model. The evaluation process included examining the R-squared value of the dependent variables, testing the t-value, and the significance of the path coefficients formed. Through this step, the extent to which the research model can explain the dependent variables and describe the strength of the relationship between the latent variables.

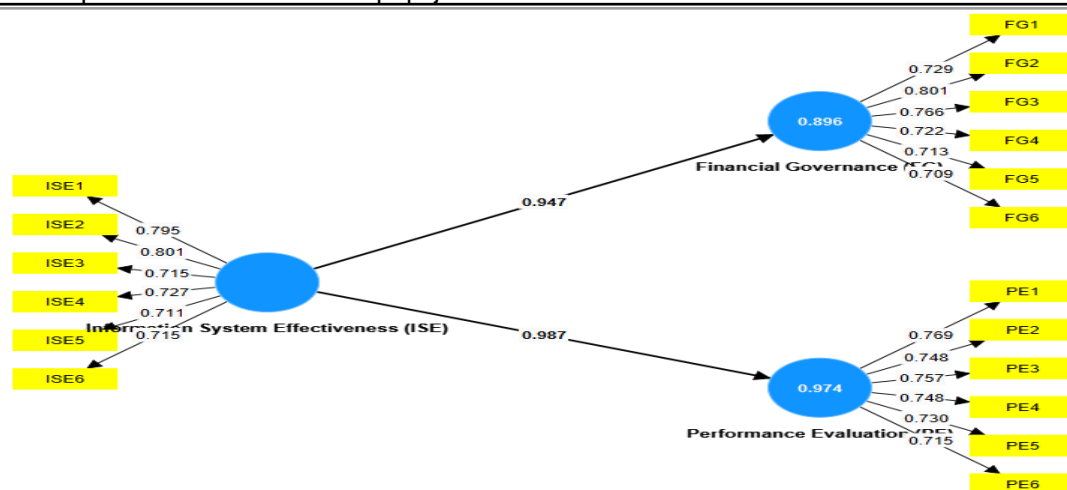


Figure 1. Tested structural model

In evaluating the models with SmartPLS, the initial stage is to assess the R-square value for each dependent latent variable. The R-squared value indicates the extent to which the independent variables explain the variation in dependent variables. The higher the R-squared value, the better the model describes the relationship between variables. The estimated R-squared values obtained through data processing with SmartPLS are presented in the following table as a basis for assessing the predictive power of the research model.

Table 5. *R-Square Values*

| | R-square | Adjusted R-square |
|-----------------------------|----------|-------------------|
| Financial Governance (FG) | 0.896 | 0.895 |
| Performance Evaluation (PE) | 0.874 | 0.874 |

Table 5 shows that the R-square value of 0.896 in Financial Governance indicates that 89.6% of the variation in financial governance can be explained by the effectiveness of the information system, which means that the information system plays a very strong role in improving the transparency, accountability, compliance, and financial control of the organisation, while the remaining 10.4% is influenced by other factors outside the research model. Meanwhile, the R-square value of 0.874 in Performance Evaluation indicates that 87.4% of performance evaluation variation can be explained by the effectiveness of the information system, which confirms that an effective information system is crucial in determining the quality of accurate and timely performance measurement, monitoring, and reporting. The Adjusted R-square value, which is almost the same as the R-square for both dependent variables, shows that the research model is stable and has a very high explanatory power. Therefore, it can be concluded that the effectiveness of the information system plays a dominant role in strengthening financial management and performance evaluation in accordance with the focus of this study.

Hypothesis Test Results

Direct (Partial) Effect

Direct (partial) effects in SmartPLS refer to the relationship between independent and dependent variables, without involving mediating variables. This relationship is measured using the path coefficient value, t-statistic, and p-value. An effect was considered significant if $t > 1.868$ and $p\text{-value} < 0.05$. Through this analysis, the extent to which each independent variable had a direct effect on the dependent variable was determined.

Table 6. Results of Direct (Partial) Effect Hypothesis Testing

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T-statistic (O/STDEV) | P-values | Alpha | Conclusion |
|---|---------------------|-----------------|----------------------------|-------------------------|----------|-------|----------------------------------|
| Information System Effectiveness (ISE) -> Financial Governance (FG) | 0.847 | 0.846 | 0.014 | 69.44 | 0.000 | 0.05 | Influential Positive Significant |
| Information System Effectiveness (ISE) | 0.887 | 0.886 | 0.004 | 240.279 | 0.000 | 0.05 | Significantly Positive |

The table above shows that the partial test results of the variables studied all have t-values > 1.868 and < 0.05 .

1. The Effect of Information System Effectiveness on Financial Management

The partial test results show that the effectiveness of the information system has a positive and significant effect on financial management, with a path coefficient value of 0.847, a t-statistic of 69.440, which is greater than the critical limit of $t > 1.868$, and a p-value of 0.000, which is less than $\alpha = 0.05$. This finding indicates that the hypothesis is accepted, such that the more effective the information system is implemented, the stronger the financial governance of the organization, especially in improving transparency, accountability, accuracy of reporting, and effectiveness of financial control based on accurate and timely data.

2. The Effect of Information System Effectiveness on Performance Evaluation

The partial test results also show that the effectiveness of the information system has a positive and significant effect on performance evaluation, with a path coefficient value of 0.887, t-statistic of 240.279 that exceeds the $t > 1.868$ limit, and p-value of 0.000, which is smaller than $\alpha = 0.05$. This confirms that the hypothesis is accepted, whereby an effective information system plays a very strong role in supporting the performance evaluation process through the provision of accurate, consistent, and timely information so that performance assessments can be carried out objectively and continuously in accordance with organizational objectives.

Effect Size (f square)

The effect size (f^2) was used to assess the magnitude of the specific influence of the independent variables on the predictive ability of the dependent variables. The evaluation was carried out by comparing the changes in the R Square value when an independent variable was removed from the model. The interpretation of the f^2 value is as follows: $f^2 < 0.02$ indicates a very small or insignificant effect, $0.02 \leq f^2 < 0.15$ indicates a small effect, $0.15 \leq f^2 < 0.35$ indicates a moderate effect, and $f^2 \geq 0.35$ indicates a large effect. Thus, this measure helps determine how strongly the contribution of each independent variable is in explaining the variation of the dependent variable in the research model. From the analysis results, the following effect sizes were obtained.

Table 7. Results of the Direct (Partial) Effect Hypothesis Test

| | f-square |
|---|----------|
| Information System Effectiveness (ISE) -> Financial Governance (FG) | 8.604 |
| Information System Effectiveness (ISE) -> Performance Evaluation (PE) | 37.547 |

Based on the results of the table, it can be explained as follows:

1. The Effect of Information System Effectiveness on Financial Management

The results of the effect size (f^2) analysis show that the effect of information system effectiveness on financial governance has an f^2 value of 8.604, which far exceeds the $f^2 \geq 0.35$ limit, thus falling into the category of large effects. This confirms that the effectiveness of information systems contributes strongly to the predictive ability of financial governance, particularly in explaining variations in transparency, accountability, and effectiveness of organizational financial management in the research model.

2. The Effect of Information System Effectiveness on Performance Evaluation

The results of the effect size (f^2) test on the influence of information system effectiveness on performance evaluation show an f^2 value of 37.547, which is also well above the criterion of $f^2 \geq 0.35$ and is categorized as a large effect. This finding indicates that information system effectiveness has a dominant contribution in explaining variations in performance evaluation, particularly in supporting accurate, objective, and timely performance measurement, monitoring, and reporting processes, thereby strengthening the strategic role of information systems in improving organizational performance.

Discussion

The Influence of Information System Effectiveness on Financial Management

The results of this study indicate that the effectiveness of information systems plays an important role in strengthening the financial governance of public sector organizations. These findings indicate that information systems capable of providing accurate, consistent, and timely data will facilitate organizations to

implement the principles of financial transparency and accountability. In the practice of public financial management, the availability of reliable information is the main basis for preparing financial reports, internal controls, and audit and accountability processes.

These findings are in line with the information system success model framework proposed by DeLone and McLean (2003), which emphasizes that system and information quality will generate net benefits for organizations, including improvements in the quality of financial management and control. When information systems function effectively, the risks of recording errors, reporting delays, and information asymmetry can be minimized, resulting in more orderly and accountable financial management.

The results of this study also support recent empirical findings, showing that the implementation of integrated financial systems in the public sector contributes to increased financial accountability and transparency. Attiogbe et al. (2025) find that the use of effective government financial management systems can strengthen public oversight and accountability mechanisms. Similar findings were reported by Sofyani et al. (2020), who stated that information technology governance plays an important role in improving the accountability and transparency of local governments.

However, several previous studies have shown inconsistent results. Some studies have found that the implementation of information systems does not necessarily directly improve financial governance if it is not supported by adequate human resources, leadership commitment, and organizational culture. In this context, information systems are often used only as administrative tools rather than as instruments for control and decision-making. These differences in results may be due to variations in the level of system utilization, organizational readiness, and institutional contexts.

The main difference between this study and previous studies lies in its focus on the effectiveness of information systems rather than merely their existence or implementation. This study emphasizes that information systems must be truly effective in supporting work processes to strengthen financial management. Thus, this study makes a new contribution by showing that the quality of information system utilization is a key factor in strengthening the financial management of public organizations.

The Influence of Information System Effectiveness on Performance Evaluation

The next discussion relates to the influence of information system effectiveness on performance evaluation. The results show that effective information systems play a strategic role in supporting the organizational performance evaluation process. Quality performance evaluation requires accurate, integrated, and timely data to enable objective and sustainable performance assessment.

Theoretically, these findings are consistent with the concept of net benefits in DeLone and McLean's (2003) model, which states that the success of an information system is reflected in improved decision quality and organizational performance. An effective information system enables organizations to monitor program achievements, compare targets and realizations, and identify areas for improvement. Without adequate system support, the performance evaluation tends to be subjective and not based on strong data.

The results of this study are in line with Pham and Vu (2020), who found that the effectiveness of accounting information systems contributes to improved sustainable performance in the public sector. In addition, Moullin (2017) emphasized that public sector performance measurement systems, such as the Public Sector Scorecard, will only be effective if supported by information systems capable of providing valid and consistent performance data. A recent study by Bisogno et al. (2025) also emphasized that the use of data and digital systems strengthens the quality of performance evaluation and decision-making in public organizations.

However, studies have shown that the existence of an information system does not necessarily improve the quality of performance evaluation if the performance indicators are not clearly formulated or if the system is only used for formal reporting. In such conditions, the information system is not used as a performance analysis tool but merely as an administrative tool. These differences may be due to differences in system maturity, data integration, and organizational commitment to using information as a basis for evaluation.

The main contribution of this study, compared to previous studies, is its ability to show that the effectiveness of information systems plays a very strong role in supporting performance evaluation when the system is used optimally and integrated with managerial processes. This study not only positions information systems as a supporting tool but also as a strategic element in ensuring the objectivity and sustainability of organizational performance evaluation.

Theoretically, this study reinforces the information system success model by showing that the benefits of information systems in the public sector are not only reflected in operational efficiency, but also in strengthening financial governance and performance evaluation. Unlike previous studies that examined these

relationships separately, this study tested both relationships simultaneously in a single integrated model.

Furthermore, this study provides an update on the context of public organizations in Indonesia, particularly OPDs, which have different regulatory and accountability characteristics from those of the private sector. Thus, the results of this study enrich the literature on the strategic role of information systems in public sector governance and performance, especially in the era of the digital transformation of government.

CONCLUSIONS, PROPOSALS, RECOMMENDATIONS

This study concludes that the effectiveness of information systems plays a decisive role in strengthening financial governance and performance evaluation in regional apparatus organizations (OPD). First, the more effective the information system used, the stronger the financial governance that is formed because a good system helps organizations carry out reporting that is more orderly, transparent, traceable, and accountable. Second, the effectiveness of information systems has also been proven to improve the quality of performance evaluation, as the availability of accurate, consistent, and timely data enables performance measurement and monitoring processes to be carried out more objectively and sustainably. Thus, the research objective of analyzing the influence of information system effectiveness on financial governance and performance evaluation has been achieved, while also confirming that an effective information system is not only an administrative tool but also a strategic element in strengthening the governance and performance of public sector organizations.

Theoretically, the results of this study reinforce the framework for the success of information systems, which emphasizes that the quality of systems and information will generate tangible benefits for organizations, particularly in the context of the public sector. This study shows that these benefits are not only reflected in work efficiency, but also in the strengthening of financial governance and the improvement of performance evaluation quality simultaneously within an integrated framework. Practically, the findings of this study confirm that OPDs need to prioritize improving the effectiveness of information systems, not just procuring applications. The concrete implication is the need to ensure data integration between units, orderly data input, data validation, and availability of fast and traceable reports. In addition, OPD leaders can use the results of this study as a basis for strengthening system-based internal controls, improving reporting accuracy, and encouraging more evidence-based performance evaluations so that organizational decisions become more accurate and accountable.

This study has several limitations that need to be considered. First, the research data were sourced from questionnaires that described the respondents' perceptions; therefore, the results were highly dependent on the respondents' level of understanding and honesty when completing the instruments. Second, the research was conducted during a specific period and in the context of OPD, so the results described the conditions at the time the research was conducted and may differ if applied to other public organizations with different system characteristics, work cultures, and policies. Third, this study only examined the influence of information system effectiveness on financial management and performance evaluation, so other factors outside the model, such as human resource competence, leadership commitment, internal control quality, and organizational culture, were not analyzed in depth, even though these factors can influence the strengthening of governance and performance evaluation.

Future research should expand the model by adding theoretically relevant variables, such as data quality, information technology governance, internal control, human resource competence, and leadership support, to explain the mechanism of influence more comprehensively. Subsequent researchers could also examine the role of mediating or moderating variables, such as whether internal controls or data quality strengthen the relationship between information system effectiveness, financial governance, and performance evaluation. In addition, it is recommended to expand the research object to several regional government agencies or compare between agencies so that the results are stronger for generalization. Finally, future research could use a mixed approach with interviews or document studies to enrich the findings and explain in more detail how information systems are used in financial management and performance evaluation practices, including implementation constraints and improvement strategies.

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