

The Effect of Accounting Information Systems Audit on Fraud Prevention in Government

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Abstract

The rapid development of information technology has encouraged governments to adopt accounting information systems in the management of public finances in order to improve efficiency, transparency, and accountability. However, the use of technology-based systems also introduces new risks, particularly related to opportunities for fraud arising from weaknesses in internal control and system security. Therefore, auditing accounting information systems becomes an important instrument to ensure system reliability and prevent irregularities in government financial management. This study aims to analyze the effect of accounting information systems audits on fraud prevention in the government sector. This study uses a quantitative approach with a survey method. Data were collected through the distribution of questionnaires to government officials involved in the management, use, and supervision of accounting information systems. Data analysis techniques include validity and reliability testing of the instruments, classical assumption tests, and simple linear regression analysis to test the research hypothesis. The accounting information systems audit variable is measured through indicators of general controls, application controls, system security, and compliance with procedures, while fraud prevention is measured through aspects of reducing fraud opportunities, improving early detection, and strengthening internal control. The results show that accounting information systems audits have a positive and significant effect on fraud prevention in government. These findings indicate that the more effective the implementation of audits on accounting information systems, the greater the ability of government organizations to minimize the potential occurrence of fraud. This study provides practical contributions for governments in strengthening technology-based financial governance and serves as an academic reference for the development of further research related to information systems auditing and fraud prevention in the public sector.

Keywords: Accounting Information Systems Audit, Fraud Prevention, Government, Information Systems, Internal Control.

INTRODUCTION

The increasingly rapid development of information technology has brought significant changes to the management of public sector finance. Governments, both at the central and regional levels, have begun to adopt technology-based accounting information systems to support financial planning, implementation, recording, and reporting processes. The implementation of accounting information systems is expected to improve operational efficiency, data accuracy, as well as transparency and accountability in state financial management. Nevertheless, the use of information technology also presents new challenges and risks that must be optimally managed.

One of the main risks in the use of accounting information systems in government is the increased potential for fraud. Fraud in the public sector may take the form of manipulation of financial data, misuse of state assets, transaction engineering, and budget irregularities carried out through technology-based systems. System complexity, weak internal control, and limited human resource competence are factors that can create opportunities for fraud. This condition

indicates that the presence of sophisticated accounting information systems does not necessarily prevent fraud if it is not accompanied by adequate supervision and control mechanisms.

Accounting information systems auditing is one of the important instruments in efforts to control and prevent fraud in the government environment. This audit aims to evaluate whether accounting information systems have been designed and operated in accordance with principles of reliability, security, data integrity, and compliance with applicable regulations. Through information systems audits, weaknesses in general controls and application controls can be identified early, thereby minimizing potential irregularities. Thus, accounting information systems audits not only serve as a detection tool but also as a fraud prevention mechanism.

Various public sector audit reports and findings indicate that there are still weaknesses in the management and supervision of government financial information systems. These weaknesses include inadequate access control settings, lack of segregation of duties, and weak supervision over data and system changes. This condition indicates that accounting information systems audits have not been fully implemented optimally and continuously, so their impact on fraud prevention still needs to be improved.

Empirically, research on the effect of accounting information systems audits on fraud prevention in the government sector is still relatively limited, especially in the context of government in Indonesia. Previous studies have tended to focus more on financial audits or internal control in general, without emphasizing the specific role of information systems audits. Therefore, research is needed that specifically examines how accounting information systems audits contribute to fraud prevention in the government environment.

Based on this background, this study aims to analyze the effect of accounting information systems audits on fraud prevention in government. The results of this study are expected to provide theoretical contributions to the development of literature on information systems auditing and fraud prevention in the public sector, as well as practical contributions for governments in strengthening transparent and accountable technology-based financial governance.

RESEARCH METHODS

Type and Research Approach

This study uses a quantitative approach with a causal associative research design, aiming to test the effect of accounting information systems audits on fraud prevention in government. The quantitative approach was chosen because it allows the measurement of relationships between variables objectively through numerical data and statistical testing.

Research Location and Time

The research was conducted in government institutions that have implemented accounting information systems in financial management. The research period took place in 2025, covering the stages of planning, data collection, data processing, and preparation of the research report.

Population and Sample

The population in this study consists of government officials directly involved in the management, use, and supervision of accounting information systems, such as finance staff,

internal auditors, and information system administrators. The sampling technique used was purposive sampling, with the following criteria:

1. Officials who use accounting information systems in their work.
2. Officials who understand financial management and supervision processes.
3. Officials with a minimum of one year of work experience.

Data Collection Techniques

Data were collected through:

1. Questionnaires using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).
2. Documentation studies, including audit policies and internal supervision reports.
3. Literature studies from textbooks, scientific journals, and relevant official publications.

Operational Definitions and Variable Measurement

Accounting Information Systems Audit (X)

Accounting information systems audits are evaluation processes of government financial information systems to ensure reliability, security, and effectiveness of controls. This variable is measured through the following indicators:

1. General system controls
2. Application controls
3. Data security and access
4. Compliance with system procedures and standards

Fraud Prevention (Y)

Fraud prevention is an organizational effort to minimize opportunities and risks of fraud. This variable is measured through the following indicators:

1. Reduction of fraud opportunities
2. Improvement of early detection
3. Effectiveness of internal control
4. Compliance with rules and ethics

Data Analysis Techniques

The collected data were analyzed using statistical software. The stages of data analysis include:

- Validity testing to measure the accuracy of research instruments.
- Reliability testing to ensure consistency of respondents' answers.

Classical assumption tests, including normality, heteroscedasticity, and multicollinearity tests. Simple linear regression analysis to test the effect of accounting information systems audits on fraud prevention. t-test to test the significance of the effect of the independent variable on the dependent variable. Coefficient of determination (R^2) to determine the contribution of the independent variable in explaining the dependent variable.

Statistical Hypotheses

The statistical hypotheses tested in this study are:

H0: Accounting information systems audits have no effect on fraud prevention in government.

H1: Accounting information systems audits have a positive and significant effect on fraud prevention in government.

RESULTS AND DISCUSSION

Research Results

Respondent Description

The respondents in this study were government officials involved in the management and supervision of accounting information systems. The majority of respondents came from finance and internal supervision units, with more than one year of work experience, and were therefore considered to have adequate understanding of the accounting information systems used. These characteristics indicate that the data obtained are relevant to describing the conditions of accounting information systems audits and fraud prevention in the government environment.

Validity and Reliability Test Results

The validity test results show that all questionnaire items have correlation coefficient values greater than the r-table value, indicating that all instruments are valid. Reliability testing using Cronbach's Alpha shows values above 0.70 for each variable, meaning that the research instruments have good consistency and are suitable for use in this study.

Classical Assumption Test Results

The normality test shows that the research data are normally distributed, as indicated by significance values above 0.05. The heteroscedasticity test shows no specific pattern in the residual distribution, indicating that the regression model is free from heteroscedasticity problems. With the classical assumptions fulfilled, the regression model used in this study is considered appropriate for further analysis.

Simple Linear Regression Analysis Results

The results of the simple linear regression analysis show that accounting information systems audits have a positive regression coefficient. The significance value of the t-test is less than 0.05, so the research hypothesis is accepted. This indicates that accounting information systems audits have a positive and significant effect on fraud prevention in government.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) shows that accounting information systems audits explain a substantial portion of the variation in fraud prevention. The remaining variation is influenced by other factors outside the research model, such as organizational culture, human resource competence, and the effectiveness of other internal controls.

Discussion

The results of this study indicate that accounting information systems audits have a positive and significant effect on fraud prevention in government. These findings suggest that the more effective the implementation of audits on accounting information systems, the higher the level of fraud prevention achieved by government institutions. Periodic information systems audits can identify control weaknesses, limit unauthorized access, and ensure the integrity and reliability of financial data.

These findings are consistent with agency theory, which states that monitoring mechanisms such as audits can reduce information asymmetry between principals and agents. In the government context, accounting information systems audits function as control tools that strengthen the accountability of government officials in managing public finances. With effective audits, opportunities for fraud can be minimized because all system activities are recorded and traceable.

In addition, the results of this study also support the fraud triangle concept, particularly the opportunity aspect. Accounting information systems audits play a role in narrowing opportunities for fraud through strengthening general and application controls. Access rights management, system-based segregation of duties, and monitoring of user activities are forms of control that can prevent data manipulation and transaction irregularities.

From a practical perspective, these findings emphasize that accounting information systems audits do not only function as detection tools after fraud occurs, but also as effective preventive instruments. Government institutions that consistently implement information systems audits tend to have higher levels of transparency and accountability in financial management, in line with efforts to achieve good governance.

However, this study also shows that fraud prevention is not solely determined by accounting information systems audits. Other factors such as organizational ethical culture, leadership commitment, and human resource competence also influence the effectiveness of fraud prevention. Therefore, accounting information systems audits need to be integrated with internal control policies and capacity development of officials to optimize fraud prevention.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that accounting information systems audits have a positive and significant effect on fraud prevention in government. This indicates that effective implementation of audits on accounting information systems can strengthen control and supervision mechanisms in public financial management, thereby minimizing the potential for fraud.

Optimally implemented accounting information systems audits are proven to enhance system security, maintain the integrity of financial data, and ensure compliance with applicable procedures and regulations. Strengthening general and application controls through information systems audits also contributes to narrowing opportunities for fraud, particularly those related to data manipulation and misuse of system access.

The results of this study also emphasize that accounting information systems audits play not only a detection role after fraud occurs, but more importantly a preventive role in supporting fraud prevention in the government environment. With effective audits, transparency and accountability in government financial management can be improved, thereby strengthening public trust in government performance.

Nevertheless, fraud prevention cannot rely solely on accounting information systems audits. Other factors such as organizational ethical culture, leadership commitment, and human resource competence also affect fraud prevention effectiveness. Therefore, accounting information systems audits should be integrated with comprehensive internal control policies to realize clean, transparent, and accountable governance.

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