

## Internal Factors in Improving the Procurement Process of Goods and Services to Prevent Fraud

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### ABSTRACT

This study aims to examine the influence of e-procurement, government internal control systems, and organizational commitment on fraud prevention. The type of research used is explanatory research, which aims to describe or prove the relationship between research variables. The main data used comes from respondents through the distribution of questionnaires, which are carried out to selected samples to understand their views on the research topic. This study involved a population of 33 employees at the Regional Revenue Agency of West Java Province, with purposive sampling technique as the sample selection method. Data analysis was carried out using multiple linear regression with a significance level of 5%. Data processing using the SPSS program version 25.00. The results of the study indicate that e-procurement, government internal control systems, and organizational commitment have a significant influence and play a very effective role in fraud prevention and detection.

**KEYWORDS:** e-procurement, internal control, fraud prevention

### I. INTRODUCTION

Along with Indonesia's economic growth and the reform era, public expectations for better government services continue to increase, as do the government's needs to support these public services. One way to meet these needs is through the procurement process. However, the implementation of government procurement of goods/services in Indonesia still faces many challenges, with irregularities and violations. This is evidenced by data from the Corruption Eradication Commission regarding corruption between 2004-2022, which shows that there were 1,310 cases of corruption related to procurement of goods/services. These fraud cases are detrimental to the state and have a negative impact on people's lives, as well as reducing the quality of government financial reports [1].

One example of a case in West Java Province is corruption in the procurement of Covid-19 basic food assistance involving the Regent of West Bandung in 2021. Aa Umbara, as Regent, was accused of arranging tenders and asking for a commission of 6% of the procurement profits. Although he served as a supervisor of procurement of goods in emergency situations, he actually intervened in the arrangement of the procurement of Covid-19 social assistance goods, working with his son, and a businessman. The West Bandung Regency Government at that time

allocated a budget of IDR 52 billion for social assistance, but Aa Umbara took advantage of the situation for his personal and family interests, by directly appointing providers of social assistance from among those closest to him.

Fraud often occurs when there is no effective detection and prevention mechanism. One way to detect and fraud prevention, especially in the government procurement process, is through the implementation of an e-procurement system. E-procurement is expected to increase transparency and accountability in procurement, thereby reducing the potential for fraud. E-procurement is a system that utilizes internet technology and e-commerce to purchase goods/services online. This system was developed by Bappenas in 2006 in accordance with Presidential Instruction Number 5 of 2004 concerning the acceleration of corruption eradication.

E-procurement can be an instrument to reduce corruption, collusion and nepotism because through e-procurement auctions become open so that more rational offers will emerge. Electronic Procurement Services are information technology management services to facilitate the implementation of electronic Procurement of Goods/Services. In addition, LKPP also provides an Electronic Catalog (e-Catalogue) facility which is an electronic information system that contains a list, type,

technical specifications and prices of certain goods from various government goods/services providers, an online audit process (e-Audit), and procedures for purchasing goods/services through an electronic catalog (e-Purchasing)

The government is also trying to strengthen the Government Internal Control System, ensuring that every activity in the management of the government budget and resources is carried out effectively, efficiently, and in accordance with applicable regulations. In the last five years, the implementation of Government Internal Control System has been increasingly emphasized with regulations and policies that encourage accountability and tighter supervision in every government agency. Government Internal Control System also includes prevention and early detection of fraud, by placing an adequate internal control system [2].

Organizational commitment is a critical factor in ensuring the integrity and success of a fraud prevention program. In the past five years, research has shown that the success of implementing control systems and technology depends on the extent to which an organization is committed to transparency, ethics, and accountability [3]. Organizations with leaders with high integrity and members who are committed to good governance tend to be more successful in preventing fraud. On the other hand, when organizational commitment is weak, technology and internal control systems often do not function optimally [4].

## II. REVIEW OF LITERATURE

**Relationship between the Role of E-Procurement, Government Internal Control, Organizational Commitment and Fraud Prevention in Procurement of Goods and Services.** the interaction between the three significantly affects fraud prevention efforts in the Indonesian public sector. This study shows that e-procurement functions as a technical tool to increase transparency, internal control ensures supervision and compliance, while organizational commitment ensures good implementation of anti-fraud policies [5]. It was also found that the effectiveness of e-procurement and internal control is greatly influenced by the level of organizational commitment. Without a strong commitment from the organization's leadership, the implementation of e-procurement will not be optimal, and the internal control system can easily be ignored or manipulated [6].

**Relationship between the Role of E-Procurement and Fraud Prevention in Procurement of Goods and Services.** E-procurement helps in fraud prevention by creating a traceable digital audit trail, increasing transparency, and reducing direct involvement between procurement and suppliers, which previously created a loophole for collusion. The study also found that widespread use of e-procurement systems in government organizations has reduced procurement fund misappropriation by 25% [7]. e-procurement significantly

reduces collusion and tender manipulation because the entire process is done electronically and transparently. Researchers also noted that countries with better IT infrastructure showed a greater reduction in fraud compared to countries with weak IT infrastructure [8].

By implementing e-procurement, there is a significant reduction in fraud cases caused by fake documents and identity forgery. This study concludes that e-procurement has succeeded in increasing accountability in procurement, although its effectiveness is highly dependent on technological infrastructure and the organization's readiness to adapt to digital change [9]. e-procurement plays a role in reducing the possibility of fraud by ensuring that the procurement process is carried out transparently and openly, and all data is recorded automatically. However, the study also noted that several cases of fraud still occur due to lack of supervision and loopholes in regulations [10]. The implementation of e-procurement helps reduce fraud by up to 30% in some areas, especially in terms of reducing price manipulation and procurement of counterfeit goods. In addition, the e-procurement system also strengthens internal monitoring mechanisms and allows early detection of anomalies in the procurement process. However, this study also emphasized that the biggest challenge in implementing e-procurement is the lack of understanding and adequate training for government employees [11].

**Role of Government Internal Control and Fraud Prevention in Procurement of Goods and Services.** Effective internal controls, including strict supervision, segregation of duties, and adequate audit procedures, play a significant role in reducing fraud in public financial management. A strong control system allows early detection of fraudulent practices, especially in budget management and procurement of goods/services [12]. important components of internal control, such as regular and independent internal audits, segregation of duties, and accurate documentation, play a significant role in fraud prevention. They found that regular monitoring and audits can reduce fraud rates by 35%. However, the study also showed that a lack of commitment from management often undermines the effectiveness of internal control [13].

Government Internal Control provides a framework that assists local governments in detecting and preventing financial misuse, but its effectiveness depends largely on the integrity and commitment of the officials responsible [14]. The implementation of stricter internal controls, such as clear segregation of duties, strong audit procedures, and the use of information technology in accounting, has resulted in a significant decrease in the number of fraud cases. It is important in detecting fraud before it reaches a large scale. The use of information systems to monitor the flow of public funds has also proven to be an effective tool for fraud prevention [15]. Although well-designed internal controls have the potential to reduce the risk of fraud, weaknesses in

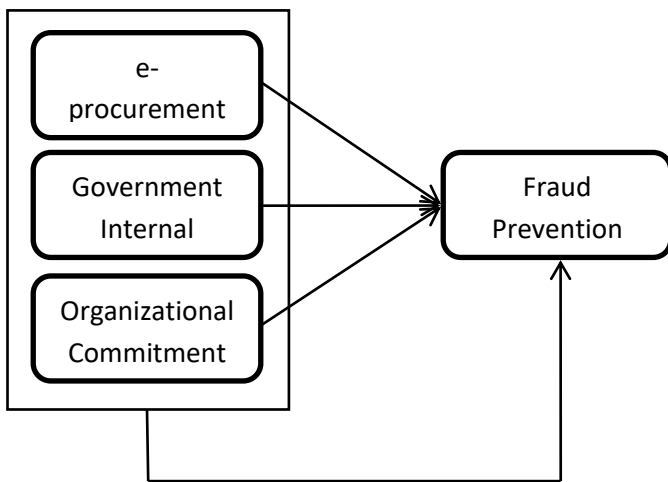
implementation, such as lack of transparency and weak oversight, are often major factors in the occurrence of fraud, requiring integrity from government officials to minimize the potential for fraud, as well as the importance of more independent external audits [16].

**Role of Organizational Commitment and Fraud Prevention in Procurement of Goods and Services.**

Without commitment from organizational leadership, anti-fraud policies and internal controls become less effective in fraud prevention [17]. Organizations that have a strong commitment to ethics and good governance tend to have more effective control mechanisms, which ultimately reduce the risk of fraud. This study also emphasizes the importance of an organizational culture that supports transparency and accountability, where these values are reinforced by commitment from all levels of the organization [18] [19].

Organizational commitment to business ethics and implementation of anti-fraud policies have a direct impact on reducing fraud cases. Continuous training on integrity and ethics, as well as the application of strict sanctions for fraud perpetrators, are very effective in creating an anti-fraud work environment [20]. An organizational culture that emphasizes ethical values, combined with strict internal control policies, reduces the potential for employees to commit fraud. The role of strong leadership in encouraging ethical commitment is an internal factor in fraud prevention efforts [21] [22].

Here is a summary of the theoretical framework that has been described, as the basis for this research:



According to the research framework outlined above, the hypotheses proposed for this study are:

H<sub>1</sub>: E-Procurement, Government Internal Control and Organizational Commitment affects Fraud Prevention in Procurement of Goods and Services

H<sub>2</sub>: E-Procurement affects Fraud Prevention in Procurement of Goods and Services

H<sub>3</sub>: Government Internal Control Affects Fraud Prevention in Procurement of Goods and Services.

H<sub>4</sub>: Organizational Commitment Affects Fraud Prevention in Procurement of Goods and Services.

**III. RESEARCH METHOD**

This type of research is descriptive verification, which is a form of research based on data collected systematically regarding facts from the object being studied. The population in this study is government agencies in Bandung City. Sampling using saturated sampling totaling 33 employees of the West Java provincial revenue agency. This study uses path analysis by processing statistical data using multiple regression analysis.

**IV. RESEARCH RESULTS**

**A. Analysis of the coefficient of determination**

The coefficient of determination test is used to measure how far the model's ability to explain the variation of the independent variable on the dependent variable. Below will be presented the results of the determination coefficient test, which are as follows:

**Table 1. Simultaneous Determination Coefficient Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Durbin-Watson
1	.679 <sup>a</sup>	.763	.631	2.4330947	1.990

a. Predictors: (Constant), X3,X2,X1

Source: SPSS Output Results

Based on the results of the determination coefficient test, it shows that the Adjusted R Square value is 0.631, which means that the variability of the dependent variable, namely the prevention of fraud in the procurement of goods and services, which can be explained by the independent variables, namely the e-procurement government internal control and organizational commitment, is 63,1%, while the rest is 36,9% explained by other variables outside the research model.

**B. Simultaneous Hypothesis Testing**

The F test is a model feasibility test (goodness of fit) that must be carried out in linear regression analysis. Below will be presented the results of simultaneous hypothesis testing, which are as follows:

**Table 2. Simultaneous Hypothesis Testing ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.407	3	8.453	26.347	.000 <sup>b</sup>
	Residual	7.430	29	.379		
	Total	23.836	32			

a. Dependent Variable: Z

b. Predictors: (Constant), X3,X2,X1

Source: SPSS Output Results

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Based on the table above, the simultaneous significance value of the regression model is 0,000, this value is smaller than the significance level of 0.05, meaning that the e-procurement, government internal control and organizational commitment simultaneously affect fraud prevention.

### C. Partial Hypothesis Testing Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.225	.341		.659	.515
e-procurement	.443	.147	.444	3.008	.004
Government internal control	.449	.151	.440	2.980	.001
Organizational commitment	.244	.064	.504	3.830	.006

a. Dependent Variable: Z

**Effect of E-Procurement, Government Internal Control, Organizational Commitment and Fraud Prevention in Procurement of Goods and Services.** Simultaneously, this study showed an influence of 63.1%. fraud Prevention in procurement of goods and services is greatly influenced by innovation and current technological developments. The West Java Provincial Revenue Agency continues to strengthen the legal framework by implementing procurement guidelines for goods and services in accordance with applicable regulations to prevent corruption. In this case, employees must also comply with these guidelines to stay on the right track. They also apply basic procurement principles consistently in every procurement process for goods and services. Bid evaluation is carried out fairly and accurately to ensure that procurement does not exceed the set budget. In addition, to maintain transparency, the West Java Provincial Revenue Agency selects suppliers or contractors based on healthy competition and carries out procurement procedures for goods and services transparently. This finding aligns with studies by [5] and [6]

**Effect of E-Procurement and Fraud Prevention in Procurement of Goods and Services.** Based on the results of the t-test in the Table, the e-procurement variable shows a probability value of 0.004 which is below 0.05. It has been proven that the use of information technology in procurement can prevent fraud, because suppliers and Procurement Officers do not need to meet face to face during the process. This eliminates the potential for verbal exchanges that can trigger bribery attempts or detrimental unilateral agreements. With minimal direct interaction between suppliers and Procurement Officers, transparency through the implementation of e-procurement helps eliminate bad practices and reduce the possibility of

irregularities. At the procurement preparation stage, this process has been running well. Transparency in the preparation of technical specifications and criteria for procurement of goods and services at the West Java Provincial Revenue Agency is very clear. For example, the e-catalogue system that displays a list of goods from various providers makes it easy to search for the goods or services needed, and allows the selection of suppliers without the need for direct meetings. In addition, the selection of suppliers is carried out openly, and the procurement schedule announced on the electronic procurement service website for auction activities is in accordance with applicable regulations. This can be seen from the announcements that are always updated in real time on the electronic procurement service website. This finding is consistent with studies by [7], [8] and [11]

**Effect of Government Internal Control and Fraud Prevention in Procurement of Goods and Services.** Based on the results of the t-test in the Table, the government internal control variable shows a probability value of 0.001 which is below 0.05. The internal control system in the West Java Provincial Revenue Agency has been well organized. Accounting records are stored in locked filing cabinets or in areas that can only be accessed by authorized parties, as a precautionary measure against potential problems. The Head of the Center routinely provides socialization to employees regarding the values that must be upheld, thereby raising awareness to avoid unethical actions, including fraud. In addition, the Regional Revenue Agency separates duties between employees responsible for recording assets and those who handle assets physically (operations) to prevent data manipulation or forgery. Access to the computer inventory storage warehouse is restricted, so that not all employees can enter and exit, in order to maintain data security. All transactions related to the procurement of goods and services are managed through a computerized system, thus minimizing errors and ensuring accountability and transparency in the procurement process. This finding is consistent with studies by [12], [13] and [15].

**Effect of Organizational Commitment and Fraud Prevention in Procurement of Goods and Services.** Based on the results of the t-test in the Table, the organizational commitment variable shows a probability value of 0.006 which is below 0.05. Strong organizational commitment to integrity, compliance, and transparency plays a significant role in reducing the risk of fraud in both the public and private sectors, especially in terms of work ethics, governance, and supervision, directly affecting the effectiveness of fraud prevention. Organizations that promote transparency and have a clear commitment to ethics and integrity values have lower fraud rates. In addition, ethical and proactive leadership in implementing anti-fraud policies and ensuring organizational compliance plays a



significant role in creating an environment that does not support fraud, the importance of ongoing training on ethics and fraud prevention, which helps strengthen organizational commitment among employees, so that they are more aware of the risk of fraud and more motivated to prevent it. This finding is consistent with studies by [17], [19], [20] and [22].

## V. CONCLUSION AND RECOMMENDATIONS

The procurement service department should strengthen the role of e-procurement, especially by increasing the accessibility of procurement announcements on the electronic procurement service website, so that the public can more easily see the transactions and activities that have been carried out. This will support transparency and build public trust in the government. Procurement officials also need to clarify the qualification requirements for providers. Before re-auctioning, they must first cancel unsuccessful auctions and explain the reasons for the auction to be repeated. In addition, procurement service providers need to consider adding e-commerce platforms, not only those under contract with the government. Many trusted e-commerce such as Shopee, Lazada, and Tokopedia have various providers, and can help increase income for MSMEs that are not yet widely known in government circles.

Company management should increase risk reduction efforts by conducting performance evaluations and monthly internal meetings, in order to improve communication between management and employees. At the West Java Provincial Revenue Agency, internal audits are currently only conducted once a year, whereas they should be conducted quarterly to ensure better supervision and reduce risks in the procurement of goods and services. In addition, an organization's commitment to ethics, integrity, and risk management is essential in preventing fraud. Without this commitment, existing policies and internal controls may be less effective in minimizing the potential for fraud.

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