

Journal of Contemporary Accounting

Volume 6 | Issue 3

Prevention of fraud in procurement of goods and services based on e-procurement

M. Ikhwan Mansyuri

Accounting Departement, Sekolah Tinggi Ilmu ekonomi Yapis, Dompus, Indonesia
ikhwanalfa@gmail.com

Muh. Syahru Ramadhan

Accounting Departement, Sekolah Tinggi Ilmu ekonomi Yapis, Dompus, Indonesia
syahru260113@gmail.com

Follow this and additional works at: <https://journal.uir.ac.id/jca>

Copyright ©2024 Authors.

M. Ikhwan Mansyuri & Muh. Syahru Ramadhan. (2024). Prevention of fraud in procurement of goods and services based on e-procurement *Journal of Contemporary Accounting*, 6(3), 172-187. doi:

[10.20885/jca.vol6.iss3.art3](https://doi.org/10.20885/jca.vol6.iss3.art3)

Prevention of fraud in procurement of goods and services based on e-procurement

M. Ikhwan Mansyuri, Muh. Syahru Ramadhan*

Accounting Departement, Sekolah Tinggi Ilmu ekonomi Yapis, Dompu, Indonesia

Article History:

Received : 2024-07-17

Revised : 2024-09-19

Accepted : 2024-09-20

Published : 024-12-19

JEL Classification:

H57, M42, O33

Keywords:

Prevention of fraud, use of technology, internal control system, employee ethics, religiosity

*Corresponding Author:

syahru260113@gmail.com

DOI:

[10.20885/jca.vol6.iss3.art3](https://doi.org/10.20885/jca.vol6.iss3.art3)

Copyright ©2024



This is an open access under
CC-BY-SA LICENSE

Abstract

The government's practice of procuring goods and services is still vulnerable to fraud and needs to be addressed. This research aims to determine the factors that can influence efforts to prevent fraud in e-procurement-based procurement of goods and services. The data in this research were obtained from the results of distributing questionnaires to employees of the Procurement Services Unit (ULP) office and the Dompu Regency BPKAD Office. Sampling in this research used a purposive sampling method. Next, the research data was tested using multiple regression testing. This research can prove that the variables of technology utilization, internal control systems, employee ethics, and religiosity can influence the prevention of fraud in the procurement of goods and services. The research results can be used as a reference for evaluating the use of information technology and the application of SPI to make it more optimal. Apart from that, it is also necessary to consider human resources, in this case employees, to be able to maintain good ethics and religiosity as the basis for actions at work to avoid various deviant or unlawful actions.

Introduction

The need for procurement of goods and services in the era of regional autonomy is increasing because development depends on regional capabilities in planning and implementing such procurement. The government procurement system for goods and services is still vulnerable to corrupt practices (Lassou et al., 2024). In this case, it is supported by a statement from the deputy chairman of the Corruption Eradication Commission, Alexander Marwata, that almost 90% of the cases handled by the Corruption Eradication Committee came from the procurement of goods and services (PBJ). This confirms that PBJ is one of the largest contributors to criminal acts of corruption (Hidayat, 2024).

Problems in the PBJ process in the government sector must be addressed because they are related to organized crime in the misuse of state finances (Doig & Sproat, 2020). In 2012, the government implemented a policy through the Government Procurement Policy Institute (LKPP). This policy is regulated in the Regent's Regulation (PERBUP) of Dompu Regency Number 23 of 2019 concerning the implementation of an e-procurement system which requires the PBJ process to use technology. The aim of applying technology in the PBJ process is to reduce direct meetings between auction organizers and participants. By adopting an online procurement system or E-procurement, the PBJ process can be carried out transparently and accountably (Romaissah et al., 2018). Furthermore, Wicaksono et al. (2017) also explained that E-procurement is implemented as a preventive measure to avoid irregularities within public organizations. In order to implement E-procurement, the Dompu district government has

established a Procurement Service Unit (ULP), where all PBJ activities within the Dompu District government will be centralized into one service unit, so as to increase cost and time efficiency, as well as provide better accountability in procurement implementation and accountability (Abutabenjeh et al., 2023).

The efforts made by the government to prevent fraud appear to be influenced by various factors, including the use of technology, internal control systems, ethics and religiosity. One form of implementing e-government to achieve good governance is by procuring goods/services electronically or e-procurement which is something new in the development of the use of technology. Around 2009, PBJ was still using conventional methods which then switched to simpler ones by utilizing information and communication technology. This is applied to LPSE, namely electronic procurement services (Ramadhan & Arifin, 2019). Research results Isnaini et al. (2020), Nu'man et al. (2020), and Yusni (2022) show that the E-procurement system has a significant influence on fraud in PBJ.

It is hoped that the use of technology through E-procurement can improve the PBJ system by the Dompu Regency government. This is because implementing E-procurement can reduce the risk of fraud in the PBJ process. Research Yevu et al. (2023) explains that fraud can be overcome with two methods, namely prevention and detection. Therefore, fraud prevention is an important strategy in handling fraud. Recent studies Afolabi et al. (2022) and Xu et al. (2021) found that the use of information technology can minimize fraud and facilitate the report audit process. Other factors that influence fraud in the goods and services procurement process include internal control. E-procurement that is implemented well will also be supported by effective, active internal control and the participation of all parties simultaneously. The internal control system must be able to reduce the perpetrator's desire to steal or act in collusion (Anggraeni et al., 2021; Bhagat & Jha, 2023). One function of monitoring the PBJ process that can be carried out is to ensure that prospective tender participants are free and have no connection with the procurement committee, plus an accurate verification and validation process can be a benchmark for preventing fraud in PBJ (Septiawan & Ningsih, 2020). Research Ramadhan and Adhim (2021a), Ramadhan and Adhim (2021b), Candrayani and Sasanti (2024), and Sulistyorini and Urumsah (2021) shows that internal control has a positive impact in preventing fraud in the procurement of goods and services.

Furthermore, factors that can influence fraud prevention are ethics, namely human behavior or actions that can be judged as good or bad based on the results of human actions which can be understood by the mind. Ethics in implementing PBJ, as regulated in Presidential Decree 54 of 2010, includes several principles, namely carrying out tasks regularly, carrying out tasks professionally, independently, responsibly, avoiding and preventing violations, not accepting compensation, and maintaining confidentiality. Research conducted by Sulistyorini and Urumsah (2021) and Ionaşcu et al. (2023) shows that ethical principles can prevent fraud. The attitude that leads to religiosity is the final factor that can prevent acts of fraud. Religiosity is an individual's way of understanding, internalizing and harmonizing religious values in everyday life (Alfiansyah & Afriady, 2022). The results of research conducted by Hayati and Amalia (2021) and Nopeanti et al. (2020) show that religiosity can be an obstacle to fraud. Moreover, in the study of the e-procurement process, the religious attitude possessed by a person will play an important role in everyday life because it can be a self-control for a person. Religiosity has been proven to prevent fraudulent practices in the e-procurement process (Alfiansyah & Afriady, 2022).

This research chose respondents from the Procurement Services Unit (ULP) and vendors because they are institutions directly involved in implementing PBJ. Therefore, the problem formulation in this research is: Does the use of technology, internal control systems, ethics and religiosity influence the prevention of fraud in e-procurement-based procurement of goods and services? The urgency of this research is regarding e-procurement and SPI, the research of which is still very limited. Apart from that, the researcher added three variables, namely the use of

information technology, ethics and religiosity, so this research is important to add theoretical references. It is hoped that the results of the research will be taken into consideration by government auditing and supervisory agencies in improving the ability of ULP employees to be more effective in carrying out PBJ procedures so as to avoid corruption.

Literature Review

Use of Technology

Information technology in the procurement process through e-procurement is one of the supporting factors in the procurement process so that procurement can be carried out honestly, transparently and accountably. Technology is a tool or object needed by the government to meet needs in the procurement process because technology can help in processing data, processing data, obtaining, storing data, and manipulating data in various ways to produce quality information. Therefore, information used through technology can display relevant, accurate and timely information because it can be used for personal, business and government purposes as well as strategic information that can assist in the decision-making process. The aim of using information technology in the procurement process is to solve problems, open creativity, and increase effectiveness and efficiency in work. Not only that, the application of information technology can foster a high professional level and foster transparency so that the procurement process through e-procurement can prevent procurement fraud. This is in accordance with research results Afolabi et al. (2022), Xu et al. (2021), Juhandi et al. (2020) shows that the use of information technology has an effect on fraud prevention.

Based on this description, it is suspected that there is an influence between the use of technology and the prevention of fraud in the procurement of goods and services so that this influence is hypothesized:

Ha₁: The use of Information Technology has an effect on fraud prevention in procurement of goods and services

Internal Control System

Internal control implemented by a government is one of the influencing factors in preventing fraud in the procurement of goods and services. Therefore, Government ULPs need to understand internal controls first before carrying out in-depth examination of information in procurement. The government must implement an effective control system so that it can assist in a procurement process that is free from fraud, so as to create an honest, transparent and accountable procurement process. The government that carries out the procurement process must have a neutral attitude in the process of procuring goods and services because the government holds a big responsibility towards the community. This is in accordance with steward theory where the government as agent will carry out the procurement process well because the government must be accountable to the principal. In theory, stewards must prioritize public interests over personal interests, so as to create a government that is clean and free from fraud in the procurement process.

Other studies that examine the influence of internal control systems in preventing fraud include Rahmawati and Pradata (2023), Ramadhan and Adhim (2021a), Ramadhan and Adhim (2021c). The results of this research show that the control system has an effect on preventing fraud in the procurement of goods and services. Based on this description, it is suspected that there is an influence between the internal control system and the implementation of fraud prevention so that this influence is hypothesized:

Ha₂: internal control system has an effect on fraud prevention in procurement of goods and services

Employee Ethics

The application of ethics in an organization is an important factor because it can help prevent, detect, deter and respond in minimizing the risk of fraud in the process of procuring goods and services via e-procurement. The creation of a good environment can encourage employees to comply with the rules or policies made by the government by following high ethical values by prioritizing high professionalism in their work so as to reduce actions that misuse assets for personal interests. Thus, organizations that always uphold integrity and do not compromise on ethical standards by setting high ethical standards at the leadership level so that subordinates can follow the behavior of their leaders. Therefore, the government must provide a comfortable environment by utilizing various cultural systems to create good employee ethics at work in order to help minimize the risk of fraud. Employee behavior must be guided by a shared commitment to creating a good ethical culture in increasing compliance with the rules that apply in the organization. When ethics is well ingrained in employees, it will be easier to design and implement government controls that are effective and free from fraud.

Several studies that examine the influence of employee ethics in preventing fraud include Fernandhytia and Muslichah (2020), Suh and Shim (2020), and Awang et al. (2019). The results of this research prove that employee ethics has an influence on fraud prevention. Based on this description, it is suspected that there is an influence between employee ethics and fraud prevention so that this influence is hypothesized:

Ha₃: employee ethics has an effect on fraud prevention in procurement of goods and services

Religiosity

Religiosity has three meanings which include piety, wara', and tadayyun. These three concepts show that religiosity involves being obedient in carrying out God's commands and avoiding His prohibitions. This attitude is known as a devout life, so that someone who is religious can be defined as an individual who lives a life full of piety. Piety in life has two dimensions, namely the vertical dimension (individual relationship with Allah) and the horizontal dimension (individual relationship with fellow humans), which is also known as social piety (Suryadi & Hayat, 2021). One way is by increasing awareness and providing religious studies to employees. By increasing employee awareness, it is hoped that fraud can be reduced or prevented. A person's unfavorable behavior and character can be controlled because of religion. A person's high level of religiosity can control a person to behave well and carry out good deeds without justifying any bad actions. Apart from that, a person's high level of religiousness will prevent someone from carrying out prohibited actions (cheating) because they feel guilty when carrying out these actions.

The level of religiosity of Dompu Regency ULP employees will influence their daily behavior. Employee religiosity is manifested not only when praying, but also in good behavior in managing external and internal impulses, such as committing fraud in the process of procuring goods and services. As Muslims, misuse of assets is prohibited behavior, so employees with high religiosity will tend to avoid it, in other words, the higher a person's religiosity value, the less likely they are to commit fraud. This is in accordance with the theory of planned behavior (TPB) where the government will carry out its duties in accordance with the rules and carry out work in accordance with religious values. This means that Dompu Regency ULP employees prioritize public interests rather than personal interests.

Several studies that examine the influence of religiosity in preventing fraud include Maulana et al. (2022), Alfiansyah and Afriady (2022), and Egita (2020). The results of this research show that religiosity influences fraud prevention. Based on this description, it is suspected that there is an influence between reliability and fraud prevention so that this influence is hypothesized:

Ha₄: religiosity has an effect on fraud prevention in procurement of goods and services

The following is an illustration of the thinking framework shown in Figure 1.

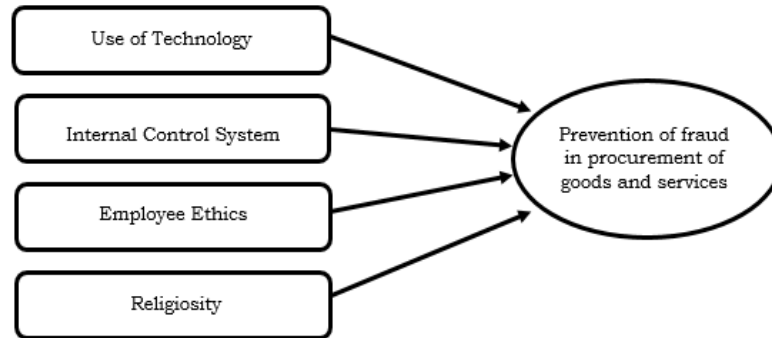


Figure 1. Research Framework

Research Method

Population and Sample

This research uses quantitative methods. Specifically, researchers used fraud detection variables for electronic procurement of goods and services (e-procurement) during the Covid-19 pandemic in Indonesia. The aim of the research is to examine the role of the use of technology, internal control systems, ethics and religiosity in efforts to detect fraud in the procurement of goods and services via e-procurement. This study took respondents from employees who work at the Unil Procurement Services (ULP) office and the Dompu Regency Regional Financial and Asset Management Agency (BPKAD) office. These two institutions are directly related to the procurement process of goods and services so they are considered as research subjects. The sample selection process used a purposive sampling method or the sample was determined by the researcher based on established criteria, namely all permanent employees working at the ULP Office and the Dompu Regency BPKAD Office who had more than one year of experience. Based on the sampling process, the number of respondents was 100 respondents.

Table 1. Sample Selection Results

No.	Description	Sample
1.	Respondents who work at ULP	40
2.	Respondents who work at BPKAD	60
Total Respondents		100

Data Analysis Technique

The data in this research uses the type of data obtained through the technique of distributing questionnaires to respondents in the field, namely by giving a collection of written statements to respondents to answer. This research uses the Likers scale as a measurement scale. In studies with indicators ranging from 1 to 6, the scale from 1 to 3 describes the level of disagreement and conversely, the scale from 4 to 6 describes the level of agreement with the questionnaire statements. The questionnaire obtained various studies that discussed the same variables as this study (Ramadhan & Adhim, 2021; Alfiansyah & Afriady, 2022; Fernandhytia & Muslichah, 2020.)

The data analysis technique in this research begins with descriptive testing and discussion of the demographics of research respondents. Next, data quality measurements were tested using validity and reliability tests. Validity testing is used to measure whether a questionnaire is valid or not, meanwhile reliability testing is a tool for measuring a questionnaire which is an indicator of a variable or construct. Classical assumption testing in this research consists of: a) data normality test which aims to test whether the regression model of the dependent variable and independent

variables has a normal distribution or not. A good regression model means that the data must be normally distributed or close to normal, b) multicollinearity test, which is a situation where there is no or linear correlation between two or more independent variables, c) heteroscedasticity test, namely a test carried out to find out whether the model. In regression, there is inequality of variance from the residuals of one observation to another. The data should be free from classical assumption tests because violation of assumptions can change the conclusions and interpretation of the results of the study. If the results of the classical assumption test are not as expected, then the researcher can do several things, such as data transformation, increasing the sample size, removing data suspected of being outliers, and so on (Ghozali, 2020). Meanwhile, multiple regression testing is used as an analytical model to determine the influence of the independent variable on the dependent variable.

The first stage of data analysis techniques is descriptive testing and discussion of respondent demographics. Next, the multiple linear regression test is used as an analytical model to test the relationship between the independent variables and the dependent variable which contains three types of tests, namely the coefficient of determination test, F test, and t test.

Based on this explanation, the multiple linear regression model is as follows:

$$PF_{it} = \alpha_0 + \beta_1 PTI_{it} + \beta_2 SPI_{it} + \beta_3 ET_{it} + \beta_4 RG_{it}$$

Description:

PF_{it} = Prevention of fraud in procurement of goods and services

PTI_{it} = Use of Technology

SPI_{it} = Internal Control System

ET_{it} = Employee Ethics

RG_{it} = Religiosity

α = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficient PTI1, SPI2, ET3, RG4

ϵ_{it} = Error

Results and Discussion

Respondent Demographics

Based on the results of distributing questionnaires, data was obtained from 100 respondents who were employees of the Dompu Regency Procurement Services Unit (ULP) and employees of the Dompu Regency Regional Financial and Asset Management Agency (BPKAD). Table 1 shows the demographic classification of research respondents consisting of gender, education level, age, length of work, and monthly income. The data shows that the number of male respondents was 58 people and 42 female respondents, dominated by the age range of 30 to 40 years with a percentage of 52%. Furthermore, the most respondents had a bachelor's degree, namely 45 people, and the least had a master's degree, namely 1 person. Based on work experience, 67% of all respondents have worked for more than 5 years with the majority having salaries between IDR 2.5 Million to TDR 5 Million.

Descriptive Statistics

The aim of this test is to obtain a universal picture of research information, including minimum values, maximum values, average values and standard deviations of the information. Based on the information in Table 2 regarding the results of descriptive statistical tests, each dependent variable is the prevention of fraud in procurement of goods and services, as well as the independent variables which consist of 5 (five) variables, namely the use of technology, internal control system, organizational culture, employee ethics, and religiosity. The minimum scale of the six research variables shows a value range between 1.00 to 3.00, which means that the

respondent's lowest answer is focused on the opinion of "disagreeing" with the statement in the questionnaire. Meanwhile, the maximum value of the six variables is 6.00 or the answer "strongly agree" to the questionnaire statement items. Furthermore, the average value of all variables is more than 5, which indicates the average of all statements with the respondents choosing "agree" with the items in the statement submitted. This is in accordance with the test output which shows that all independent variables can influence the prevention of fraud in the procurement of goods and services. The results of statistical testing also reveal that the standard deviation value is higher than the average value, which means that the research data has a high level of variation in the fraud prevention variable.

Table 2. Demographic Characteristics of Respondents

Demography Characteristics		Number of Participants	Percentage
Gender	Male	42	42%
	Female	58	58%
	Total	100	100%
Education	Senior High School	44	44%
	Diploma	10	10%
	Bachelor Degree	45	45%
	Master Degree	1	1%
	Doctoral Degree	0	0%
	Total	100	100%
Age	Less than 20 years	0	0%
	Between 20-30 years	27	27%
	Between 30-40 years	52	52%
	Between 40-50 years	17	17%
	Between 50-60 years	4	4%
	Over 60 years	0	0%
Length of Work	Total	100	100%
	1 to 2 years	6	6%
	2 to 3 years	16	16%
	3 to 4 years	11	11%
	4 to 5 years	0	0%
	Over 5 years	67	67%
Income	Total	100	100%
	Less than IDR 2.5 million	24	24%
	IDR 2.5 – IDR 5 million	74	74%
	IDR 5 – IDR 10 million	2	2%
	IDR 15 – IDR 20 million	0	0%
	More than IDR 20 million	0	0%
Total	Total	100	100%

Table 3. Descriptive Statistics Test Results

Variabel	Minimum	Maximum	Mean	Std Deviation
Use of technology	2.00	6.00	5.17%	8.77
Internal Control System	3.00	6.00	5.07%	9.18
Employee Ethics	3.00	6.00	5.23%	8.45
Religiosity	1.00	6.00	5.21%	9.14
Fraud Prevention	3.00	6.00	4.93%	8.83

Data Validity Test

Based on the results of data quality testing, all statement items measuring the variables of technology utilization, internal control system, organizational culture, employee ethics, religiosity,

and fraud prevention are valid. This is because all the statement indicators show a correlation value $> r$ table of 0.1946 as shown in Table 4.

Table 4. Validity Test Results

Variable	Indicator	Pearson Correlation	t-table	Decision
Fraud Prevention	1	0.756	0.1946	Valid
	2	0.846	0.1946	Valid
	3	0.831	0.1946	Valid
	4	0.850	0.1946	Valid
	3	0.832	0.1946	Valid
	6	0.704	0.1946	Valid
use of information technology	1	0.793	0.1946	Valid
	2	0.848	0.1946	Valid
	3	0.874	0.1946	Valid
	4	0.896	0.1946	Valid
	5	0.917	0.1946	Valid
	6	0.865	0.1946	Valid
Internal Control System	1	0.865	0.1946	Valid
	2	0.907	0.1946	Valid
	3	0.915	0.1946	Valid
	4	0.903	0.1946	Valid
	5	0.850	0.1946	Valid
Employee Ethics	1	0.838	0.1946	Valid
	2	0.907	0.1946	Valid
	3	0.905	0.1946	Valid
	4	0.903	0.1946	Valid
	5	0.866	0.1946	Valid
	6	0.889	0.1946	Valid
	7	0.864	0.1946	Valid
	8	0.829	0.1946	Valid
Religiosity	1	0.872	0.1946	Valid
	2	0.831	0.1946	Valid
	3	0.868	0.1946	Valid
	4	0.894	0.1946	Valid
	5	0.885	0.1946	Valid

Furthermore, testing the reliability of the data shows that the statements in the questionnaire have a Cronbach's alpha value of >0.6 , meaning the data is reliable. A summary of reliability testing is shown in Table 5.

Table 5. Reliability Test Results

Variable	N of Item	Cronbach Alpha	Alpha	Decision
Fraud Prevention	6	0.887	0.60	Reliable
Use of technology	6	0.931	0.60	Reliable
Internal Control System	5	0.933	0.60	Reliable
Employee Ethics	8	0.956	0.60	Reliable
Religiosity	5	0.919	0.60	Reliable

Hypothesis Testing

Multiple linear regression test. This test is used as a model to facilitate analysis of the influence of the independent variable on the dependent variable. The regression model is used to test factors such as the use of technology, internal control systems, employee ethics, and religiosity in

preventing fraud in the procurement of goods and services. Furthermore, based on information regarding the summary of regression model testing results presented in Table 6, a multiple linear regression equation can be formulated in this research, namely:

$$PF_{it} = 0,732 + 0,238PT_{it} + 0,481SPI_{it} + 0,236BO_{it} + -0,044EP_{it} + 0.149G_{it} + \varepsilon_{it}$$

Table 6. Regression Model Testing Results

Model	<i>Unstandardized koefisien</i>		T	Sig.	Decision
	B	Standar Error			
a (constant)	0.732	1.701	0.431	0.668	
Use of technology	0.238	0.071	2.350	0.001	Accepted
Internal Control System	0.481	0.131	3.682	0.000	Accepted
Employee Ethics	0.144	0.085	0.516	0.027	Accepted
Religiosity	0.149	0.070	2.133	0.036	Accepted
<i>Dependent Variable:</i>	Fraud Prevention				
N	100				
<i>R Squared</i>	0.797				
<i>Coefficient of Determination (R²)</i>	0.786				
<i>F statistik</i>	73.785				
<i>Probability (F-Statistic)</i>	0.000 ^b				

Furthermore, Table 5 shows the determination coefficient value of 0.797. In other words, 20.3% of the variation in the relationship cannot be explained by the independent variables. The probability (statistics) also shows a value of 0.000 < 0.05 which proves that the variables of technology utilization, internal control systems, organizational culture, employee ethics, and religion simultaneously have an effect, meaning that there is at least one independent variable related to the variable of preventing fraud in the procurement of goods and services. In addition, the variable of technology utilization has a significant value at the level of 0.001 with a regression coefficient of 0.238 which shows that the variable of technology utilization has a positive effect on fraud detection, meaning that every increase of 1 independent variable will increase the dependent variable by 0.238 with the assumption that other variables are not examined in this study. Then, the internal control system variable has a sig. value of 0.000 and a regression coefficient of 0.481. This means that the internal control system has a positive effect on preventing fraud in the procurement of goods and services. The results of the religiosity test show a sig. value. shows a figure of 0.036 < 0.05 and a regression coefficient of 0.144, so it can be said that the higher a person's religiosity, the better the prevention of fraud in the procurement of goods and services. In addition, employee ethics shows a significance value of 0.027 > 0.05 and a regression coefficient of 0.149, meaning that this variable has a positive effect on the prevention of fraud in the procurement of goods and services. The application of employee ethics in government or the public sector can help improve fraud prevention and thus have an impact on reducing corruption cases in the government sector.

Utilization of technology and prevention of fraud in procurement of goods and services.

The use of technology has been proven to influence the prevention of fraud in the procurement of goods and services. This means that the use of technology in the e-procurement process is very important in procuring goods and services, especially in the planning, testing and reporting stages. The open use of information technology contributes to the use of procurement through e-procurement because information technology systems can foster a sense of honesty, reliability, transparency and accountability, so that all vendors and procurement related parties can directly monitor the procurement process. Accounting information system users not only have expectations for the quality of the system for preventing fraud, but also for the quality of the

information that is the output of an information system. If the information produced is accurate, timely, relevant and complete, fraud prevention will be carried out well. Quality information makes organizations feel helped because they benefit from the information. This shows that fraud prevention can also be influenced by the quality of information. The higher the quality of information, the higher the use of accounting information systems. The system is said to be successful if the quality of the information is able to produce the information needed for decision making to prevent internal and external fraud. Based on the results of respondents' answers related to the use of information technology in the process of procuring goods and services, including facilities and infrastructure in the form of computers to support increasing the use of technology in the e-procurement process and already having software or applications such as Microsoft Excel, Microsoft Word and so on to support his job. Apart from that, the procurement service unit has provided an internet network with adequate capacity. This network is used as a link between officials in sending the required data and information. Not only that, computers in ULP are always regularly maintained to avoid damage. If damage occurs, the ULP unit will immediately repair it so that users can enjoy the auction process well. Then, the initial transaction process up to the preparation of reports in ULP is carried out computerized and the same goes for the e-procurement based goods and services procurement process so that vendors and other parties can directly monitor the goods auction process, so that it can help minimize the occurrence of fraud. The higher the level of technology use in the process of procuring goods and services, the better it will be in preventing fraud.

This is in accordance with research results Jahani et al. (2021), Juhandi et al. (2020), and Ali et al. (2019) shows that information technology can detect and prevent fraud automatically and is useful as a step to prevent fraud. Afolabi et al. (2022) and Xu et al. (2021) proves that the procurement process using digitalization with e-procurement technology can eradicate the tendency to commit fraud. Therefore, information technology is used to obtain, process, store and distribute various types of information documents by utilizing computers and telecommunications which emerged from the strong encouragement of the Dompu Regency government's ULP for innovation and new creativity that is able to overcome various problems in the process of procuring goods and services.

Internal control system and fraud prevention for procurement of goods and services

The results of statistical testing show that the internal control system influences fraud prevention. This means that the implementation of an internal control system in the e-procurement process is very important in procuring goods and services. The procurement service unit (ULP) has an important role in controlling and supervising the policies and rules implemented in an organization, especially in systems that are already running in the use of e-procurement. The implementation of a control system in the procurement process is an important factor because the procurement service unit must control each stage of procurement of goods and comply with the law on procurement of goods and services. A good and strong control system will produce effective management in dealing with various acts of fraud, so that the level of fraud can be minimized. The relationship between the internal control system and fraud prevention in the government is very close. A well-functioning internal control system can reduce the possibility of fraud occurring. However, if the government's internal control system is not effective, fraud will often occur. Therefore, ULP must implement SPI effectively so that it can help minimize the occurrence of fraud in the procurement of goods and services. Apart from that, in order to avoid fraud, the government must implement honesty, openness and mutual assistance as well as eliminate opportunities for fraud and sanctions for actions that violate the law. This is in accordance with the respondent's answer that the control environment in the Procurement Services Unit (ULP) is good because in implementation it follows the rules and regulations for the procurement of goods and services. Not only that, the information and communication carried out within the ULP environment has been carried out well in the

auction process, both between employees and auction participants. In addition, the process of implementing control and taking corrective action is carried out in a timely manner. This can be seen from the respondents' answers regarding monthly salary receipts, the average employee salary receipt is IDR5,000,000 up to IDR10,000,000, already enough so there is no intention to commit fraud in the process of procuring goods and services.

This is clear because the SPI structure owned by the Procurement service unit (ULP) already contains a planning, implementation, control and monitoring framework for achieving the objectives of procuring goods and services. In addition, procedures are available for effective monitoring of internal control performance, both routine and specific. This is in accordance with the steward theory where this condition is based on a great service attitude developed by the steward. The attitude of service is an attitude that replaces personal interests with service as the basis for the ownership and use of power. Important aspects in achieving organizational goals are behavioral factors, human behavior, human patterns, psychological mechanisms (motivation, identification and power) in leading an organization (Glinkowska & Kaczmarek, 2015). Thus, the procurement service unit (ULP) in carrying out the procurement of goods and services must comply with procedures and maintain professionalism and independence through e-procurement so that it can minimize the occurrence of fraud in the process of procuring goods and services. The research results are in accordance with Ramadhan and Adhim (2021a), Nawawi and Salin (2018), Aziz and Othman (2021), and Ramadhan and Adhim (2021c) shows that the internal control system has an influence on fraud detection. This means that the implementation of the government's internal control system is good at minimizing the occurrence of fraud. The better the control system implemented by the government, the greater it will be in preventing fraud at every stage of the goods and services procurement process.

Employee ethics and prevention of fraud in procurement of goods and services

The results of this research show that employee ethics influences the prevention of fraud in the procurement of goods and services. This means that all procurement service unit (ULP) employees in carrying out auction assignments for the procurement of goods and services via e-procurement have good abilities, such as intelligence, education, experience and training to be able to provide added value to the government by providing good performance. Ethics are a person's living habits that are based on the values held by an individual or group, which determine what is considered good or bad and what is appropriate or inappropriate. Therefore, good ethics or morals are to be able to comply with laws based on moral values, so that we can prevent fraud in the process of procuring goods and services. Not only that, the higher the morality of ULP employees, the higher the awareness in preventing fraud.

Furthermore, ULP employees who have good morality and ethics can influence a person's behavior in any situation. This is in accordance with the triangle fraud theory in terms of opportunities, when employees in the process of procuring goods and services there is an opportunity to commit fraud, both in terms of pre-planning, preparation, implementation and reporting, however, Dompu Regency ULP employees have strong ethical and moral awareness. high, so that in carrying out the task of procuring goods and services they prioritize the public interest rather than personal interests. This means they prioritize and encourage ethical behavior is an effective way to prevent fraud because they respect the law and hold themselves to high moral standards. Morality or ethics reflects how a person realizes, practices and expresses ULP employees' beliefs about what is right and wrong. Morality shows how a person makes decisions when faced with a moral dilemma. The higher a person's morality, the more difficult it is for ULP employees to commit fraud.

This is supported by the respondents' answers, which include statements including that employees in carrying out e-procurement process assignments are in accordance with existing policies in the ULP and all employees have carried out their duties professionally. Not only that, all

ULP employees in the procurement process do not influence other people, either directly or indirectly, which results in unhealthy competition. This shows that ULP employees really uphold ethics which results in the process of procuring goods and services via e-procurement being free from fraud. Apart from that, ULP employees always receive orders from above to carry out their duties and they are very responsible for the job description that has been given, so that when carrying out assignments, the first thing that is instilled in ULP employees is honesty, transparency, accountability so that they can avoid conflicting interests of the parties. which is related. So that employees will take precautions that could be detrimental to the organization where they work. In procurement assignments, they are not allowed to accept compensation from related parties and always maintain confidentiality and prevent misuse of electronic data and information.

Based on the research results, it shows that all Dompu Regency ULP employees have been instilled with good ethics in carrying out their work honestly and responsibly, so that the implementation of procurement via e-procurement can minimize fraud, both during general procurement planning, selecting providers, selecting jobs, selecting consulting services and other services. ULP employees have a professional commitment and a sense of responsibility towards their profession to prevent fraud in the procurement of goods and services, because ULP employees believe in the goals and values of the profession. ULP employees are also willing to protect the name of government agencies and wish to maintain membership status in the profession. Professional commitment will lead to the behavior of ULP employees to protect the public interest without any desire to damage their profession. Research results Fernandhytia and Muslichah (2020), Suh and Shim (2020), Awang et al. (2019) proves that ethics has an influence on fraud prevention. This means that the higher the ethics possessed by Dompu Regency ULP employees in carrying out the process of procuring goods and services via e-procurement, the lower the tendency to commit fraud. Therefore, ethics training must be carried out for every employee so that they are aware of minimizing fraud in the e-procurement process.

Religiosity and prevention of fraud in procurement of goods and services

The results of partial statistical testing show that religiosity influences prevention of fraud in procurement of goods and services. This means that Dompu Regency government ULP employees are required to have high integrity because this will influence them in carrying out actions that prioritize personal interests. Reliability is one thing that ULP employees must have in carrying out the process of procuring goods and services via e-procurement because it is an important value in a person that can influence behavior. The higher the level of religiosity of ULP employees, the lower the tendency to behave deviantly. This means that ULP employees must be obedient and have a correct understanding of religion and will always apply appropriate behavior in the process of procuring goods and services. Religion plays an important role in daily life because it can function as self-control for ULP employees. This is in accordance with the respondents' answers in the questionnaire statement that ULP employees in carrying out their work always adhere to religious values because religion teaches that when working you must be honest so that the income you receive becomes a blessing. Therefore, when working must be accompanied by religious values, it will make the heart feel comfortable, happy and peaceful. Religiosity must be instilled in Dompu Regency Government ULP employees so that deviant acts that are prohibited in religion, such as misuse of assets for personal gain, and unlawful acts that harm other people can be avoided. This is in accordance with the theory of planned behavior (TPB) where behavior can be emphasized on religious values. In the procurement service unit, religious studies must be carried out related to awareness of committing fraud, so that employees at ULP can be aware of the sanctions they will receive when committing violations. Fraud prevention can be done by increasing employee awareness regarding religious values.

Religiosity is one of the appreciations and attitudes towards life of ULP employees which are based on the religious values they adhere to. This appreciation is demonstrated through

compliance behavior in carrying out work in accordance with the goods and services procurement law where ULP employees are prohibited from taking sides with vendors or other parties related to the procurement process which could harm other people. Therefore, ULP employees must act independently, which means employees must act neutrally and must not take sides with anyone because ULP employees will be responsible to the community as a form of government performance. Independent employees can help minimize the occurrence of fraud in the process of procuring goods and services via e-procurement. Religiosity is a person's deepening of religion which involves beliefs, symbols and values that are driven by spiritual power. A person who has a high level of religiosity will indirectly control himself not to commit deviant acts, so as to minimize the occurrence of fraud. Research results Maulana et al. (2022), Alfiansyah and Afriady (2022), Egita (2020) that reliability has been proven to increase fraud prevention efforts so that the possibility of fraudulent acts decreases. When employees use the e-procurement system, they will not manipulate the inputted data because they can refrain from doing bad things. Not only that, in the Dompu Regency ULP agency, they always provide discipline in every task and always protect themselves from fraud. In the procurement of goods and services through e-procurement.

Conclusion

Based on the research results, the variable use of technology is proven to influence the prevention of fraud in procurement of goods and services, which means that the use of technology in the e-procurement process is very important, especially in the planning, testing and reporting stages. Apart from that, internal control system variables have also been proven to influence fraud prevention because SPI has an important role in controlling and supervising the policies and rules implemented in an organization. Furthermore, in this research, employee ethics variables can influence fraud prevention because all ULP and BPKAD employees in carrying out auction assignments for procurement of goods and services via e-procurement have good abilities, such as intelligence, education, experience and training to be able to provide added value. for the government by providing good performance. The last variable, religiosity, is also shown to influence fraud prevention because employees have high levels of integrity in their work, especially in using e-procurement processes..

Overall, the results of the study indicate that there are various factors that have proven effective in preventing fraud in the procurement of goods and services. However, in every use of technology such as the e-procurement system, there are things that users need to pay attention to, namely improving technological infrastructure, considering cybersecurity issues, or resistance to change among stakeholders. Therefore, the ULP and BPKAD Offices of Dompu Regency must continue to optimize the use of information technology and the implementation of SPI in the procurement of goods and services. In addition, it is also necessary to consider human resources in this case employees to be able to maintain good ethics and religiosity as the basis for action in working. This can be attempted by addressing ethical and religious factors in a practical context, such as training programs, ethical guidelines, or promoting a culture of integrity in organizations. In this study, it was only limited to the Dompu Regency area, so suggestions for further researchers are expected to be able to examine factors that can prevent fraud in government units/agencies located in other areas, because there may be factors such as regional characteristics and community culture that differentiate between regions.

References

- Abutabenjeh, S., Dimand, A.-M., & Tao, J. (2023). Determinants of the success of cooperative public procurement. *Public Performance & Management Review*, 46(4), 1–20. <https://doi.org/10.1080/15309576.2022.2115086>

- Afolabi, A., Ibem, E., Aduwo, E., & Tunji-Olayeni, P. (2022). Digitizing the grey areas in the Nigerian public procurement system using e-Procurement technologies. *International Journal of Construction Management*, 22(12), 2215–2224. <https://doi.org/10.1080/15623599.2020.1774836>
- Alfiansyah, I., & Afriady, A. (2022). Pengaruh penerapan sistem pengendalian internal pemerintah, kompensasi, dan religiusitas terhadap pencegahan fraud (studi kasus pada BPKA Kota Bandung). *Jurnal Buana Akuntansi*, 7(1), 97–105. <https://doi.org/10.36805/akuntansi.v7i1.2213>
- Ali, M. A., Azad, M. A., Parreno Centeno, M., Hao, F., & Moorsel, A. van. (2019). Consumer-facing technology fraud: Economics, attack methods and potential solutions. *Future Generation Computer Systems*, 100, 408–427. <https://doi.org/10.1016/j.future.2019.03.041>
- Anggraeni, N. M., Sailawati, S., & Malini, N. E. L. (2021). Pengaruh whistleblowing system, sistem pengendalian internal, budaya organisasi, dan keadilan organisasi terhadap pencegahan kecurangan. *Jurnal Akuntansi Keuangan Dan Bisnis*, 14(1), 85–92. <https://doi.org/10.35143/jakb.v14i1.4613>
- Awang, Y., Rahman, A. R. A., & Ismail, S. (2019). The influences of attitude, subjective norm and adherence to Islamic professional ethics on fraud intention in financial reporting. *Journal of Islamic Accounting and Business Research*, 10(5), 710–725. <https://doi.org/10.1108/JIABR-07-2016-0085>
- Aziz, F. L. A., & Othman, I. W. (2021). Internal Auditors' Perception on the efficacy of fraud prevention and detection in the public sector. *Universal Journal of Accounting and Finance*, 9(4), 764–772. <https://doi.org/10.13189/ujaf.2021.090422>
- Bhagat, G., & Jha, K. N. (2023). Modeling the competition-restrictive actions in public works procurement. *Journal of Public Procurement*, 23(4), 365–388. <https://doi.org/https://doi.org/10.1108/JOPP-12-2022-0060>
- Candrayani, M., & Sasanti, E. E. (2024). The effect of internal inventory control and accounting information systems on the prevention of fraud in inventory (study at PT . Astra International Tbk . - Honda NTB branch). *Asian Journal of Management Entrepreneurship and Social Science*, 04(02), 140–158.
- Doig, A., & Sproat, P. A. (2020). Local responses to a national initiative on organised crime and local government procurement fraud. *Journal of Financial Crime*, 27(1), 78–91. <https://doi.org/https://doi.org/10.1108/JFC-12-2018-0129>
- Egita, E. (2020). Pengaruh religiusitas, reward and punishment, dan job rotation terhadap fraud. *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ*, 7(1), 55–64. <https://doi.org/10.32699/ppkm.v7i1.1022>
- Fernandhytia, F., & Muslichah, M. (2020). The effect of internal control, individual morality and ethical value on accounting fraud tendency. *Media Ekonomi Dan Manajemen*, 35(1), 112. <https://doi.org/10.24856/mem.v35i1.1343>
- Ghozali, I. (2020). *Aplikasi analisis multivariate dengan program IBM SPSS 23* (8th ed.). BP UNDIP.
- Glinkowska, B., & Kaczmarek, B. (2015). Classical and modern concepts of corporate governance (stewardship theory and agency theory). *Management*, 19(2), 84–92. <https://doi.org/10.1515/manment-2015-0015> 1.
- Hayati, N., & Amalia, I. (2021). The effect of religiosity and moderation of morality on fraud prevention in the management of village funds. *The Indonesian Accounting Review*, 11(1), 105–114. <https://doi.org/10.14414/tiar.v11i1.2297>

- Hidayat, M. A. (2024). KPK: Hampir 90 persen korupsi menyangkut pengadaan barang dan jasa. *Wnn. Viva.Co.Id*. <https://www.viva.co.id/berita/politik/1694240-kpk-hampir-90-persen-korupsi-menyangkut-pengadaan-barang-dan-jasa>
- Ionașcu, A., Barbu, C. A., & Popa, A. (2023). Ethics in the banking sector. *Global Ethics - Key of Sustainability (GEKOS)* 2022), 19, 137–145. <https://doi.org/10.18662/lumproc/gekos2022/11>
- Isnaini, D. B. Y., Nurhaida, T., & Pratama, I. (2020). Moderating effect of supply chain dynamic capabilities on the relationship of sustainable supply chain management practices and organizational sustainable performance: A study on the restaurant industry in Indonesia. *International Journal of Supply Chain Management*, 9(1), 97–105.
- Jahani, N., Sepehri, A., Vandchali, H. R., & Tirkolaee, E. B. (2021). Application of industry 4.0 in the procurement processes of supply chains: A systematic literature review. *Sustainability (Switzerland)*, 13(14), 1–25. <https://doi.org/10.3390/su13147520>
- Juhandi, N., Zuhri, S., Fahlevi, M., Noviantoro, R., Abdi, M. N., & Setiadi. (2020). Information technology and corporate governance in fraud prevention. *E3S Web of Conferences*, 202, 1–10. <https://doi.org/10.1051/e3sconf/202020216003>
- Lassou, P. J. ., Sorola, M., Senkl, D., Lauwo, S. G., & Masse, C. (2024). Monetization of politics and public procurement in Ghana. *Accounting, Auditing & Accountability Journal*, 37(1), 85–118. <https://doi.org/https://doi.org/10.1108/AAAJ-07-2021-5341>
- Maulana, R., Purnamasari, P., & Maemunah, M. (2022). Pengaruh lingkungan pengendalian dan religiusitas terhadap pencegahan kecurangan. *Bandung Conference Series: Accountancy*, 2(2), 975–985. <https://doi.org/10.29313/bcsa.v2i2.2824>
- Nawawi, A., & Salin, A. S. A. P. (2018). Internal control and employees' occupational fraud on expenditure claims. *Journal of Financial Crime*, 26(7), 1–16. <https://doi.org/10.1108/BIJ-10-2012-0068>
- Nopeanti, V., Tarjo, T., & Haryadi, B. (2020). Religiosity moderation on the effect of whistleblowing intention and fraud tendency. *Asia Pacific Fraud Journal*, 5(2), 266–276. <https://doi.org/10.21532/apfjournal.v5i2.169>
- Nu'man, A. H., Nurwandi, L., Bachtiar, I., Aspiranti, T., & Pratama, I. (2020). Social networking, and firm performance: Mediating role of comparative advantage and sustainable supply chain. *International Journal of Supply Chain Management*, 9(3), 664–673.
- Rahmawati, L., & Pradata, B. G. (2023). The influence of corporate culture and internal control systems on the prevention of merchandise fraud. *Jurnal Ilmiah Manajemen Kesatuan*, 11(3), 1483–1494. <https://doi.org/10.37641/jimkes.v11i3.2357>
- Ramadhan, M. S., & Adhim, C. (2021a). Bagaimana mengoptimalkan kualitas probity audit? *Jurnal Akuntansi Multiparadigma*, 12(3), 637–650. <https://doi.org/10.21776/ub.jamal.2021.12.3.36>
- Ramadhan, M. S., & Adhim, C. (2021b). Fraud detection in the procurement of goods and services. *Journal of Contemporary Accounting*, 3(3), 113–129. <https://doi.org/10.20885/jca.vol3.iss3.art1>
- Ramadhan, M. S., & Adhim, C. (2021c). Fraud detection in the procurement of goods and services. *Journal of Contemporary Accounting*, 3(3), 113–129. <https://doi.org/10.20885/jca.vol3.iss3.art1>

- Ramadhan, M. S., & Arifin, J. (2019). Efektivitas probity audit dalam mencegah kecurangan pengadaan barang dan jasa. *Jurnal Akuntansi Multiparadigma*, 10(3), 550–568. <https://doi.org/10.21776/ub.jamal.2019.10.3.32>
- Romaissah, Imtikhanah, S., & Hidayah, R. (2018). Pengaruh implementasi sistem e-procurement dan pengendalian internal terhadap pencegahan fraud pengadaan barang/jasa pemerintah. *Jurnal Neraca*, 15(2), 65–80.
- Septiawan, B., & Ningsih, D. F. (2020). Dewan redaksi jurnal riset akuntansi & komputerisasi akuntansi penerapan e-procurement dan pengendalian internal dalam meningkatkan efektivitas pencegahan fraud pengadaan barang dan jasa. *JRAK: Jurnal Riset Akuntansi & Komputerisasi Akuntansi*, 11(2), 269.
- Suh, J. B., & Shim, H. S. (2020). The effect of ethical corporate culture on anti-fraud strategies in South Korean financial companies: Mediation of whistleblowing and a sectoral comparison approach in depository institutions. *International Journal of Law, Crime and Justice*, 60(July), 100361. <https://doi.org/10.1016/j.ijlcj.2019.100361>
- Sulistiyorini, L., & Urumsah, D. (2021). Determinan pencegahan fraud pengadaan barang & jasa perguruan tinggi di Indonesia. *Proceeding of National Conference on Accounting & Finance*, 3, 181–190. <https://doi.org/10.20885/ncaf.vol3.art16>
- Wicaksono, A. P., Urumsah, D., & Asmui, F. (2017). The implementation of e-procurement system: indonesia evidence. *SHS Web of Conferences*, 34(7), 10004. <https://doi.org/10.1051/shsconf/20173410004>
- Xu, Y., Chong, H. Y., & Chi, M. (2021). A review of smart contracts applications in various industries: a procurement perspective. *Advances in Civil Engineering*, 21(4), 1–25. <https://doi.org/10.1155/2021/5530755>
- Yevu, S. K., Yu, A. T. W., & Darko, A. (2023). Barriers to electronic procurement adoption in the construction industry: a systematic review and interrelationships. *International Journal of Construction Management*, 23(6), 1–20.
- Yusni, Y. (2022). Pengaruh implementasi e-procurement dan komitmen organisasi terhadap pencegahan fraud pengadaan barang/jasa dengan sistem pengendalian internal pemerintah sebagai variabel moderasi. *INOBIIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 5(2), 138–148. <https://doi.org/10.31842/jurnalinobis.v5i2.219>