

THE INFLUENCE OF E-PROCUREMENT IMPLEMENTATION, ORGANIZATIONAL COMMITMENT, AND EMPLOYEE COMPETENCE ON FRAUD PREVENTION IN THE PROCUREMENT OF GOODS AND SERVICES AT EDTL, E.P. DILI, TIMOR-LESTE

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ABSTRACT

This research was conducted at EDTL, E.P Dili Timor Leste. The purpose of this study was to determine the influence of e-procurement implementation, organizational commitment, and employee competence on the prevention of fraud in the procurement of goods and services both partially and simultaneously. The research data were obtained through EDTL, E.P. employees, Timor Leste in the procurement system section, totaling 59 people. The research method uses a survey method with a quantitative approach and sampling is done using a non-probability sampling technique. Data were collected using a questionnaire with a Likert scale distributed to all research respondents. Thus, the fourth hypothesis in this study states that the variables of E-procurement Implementation, organizational commitment, and employee competence simultaneously have a significant effect on fraud prevention. Based on the adjusted R square, the contribution of the variables E-procurement Implementation, organizational commitment, employee competence to fraud prevention is 45% and the remaining 55% is influenced by other variables outside this study. So, the level of influence of E-procurement Implementation in the procurement of goods and services program, employee organizational commitment integrated with quality employee competence will reduce the chances of fraud committed by employees.

KEYWORDS: E-procurement Implementation, Organizational Commitment, Employee Competence, Fraud Prevention

I. INTRODUCTION

The business world is currently experiencing significant progress, both in the private and government sectors. This progress will support the government in achieving development, particularly in the construction sector. All companies are required to be more professional in managing their businesses, especially in the procurement of goods and services. Public procurement is the acquisition of goods, services, and public works in a specific manner and at a specific time, resulting in the best value for the public.

Procurement of goods and services by state-owned enterprises (SOEs) is a crucial activity in supporting operational activities to realize development. Viewed from various perspectives, progress is inextricably linked to procurement activities. One example is in the economic sector, where the development of facilities and infrastructure supporting economic growth is realized through

procurement mechanisms, including the provision of roads, bridges, telecommunications infrastructure, electricity and energy, and others.

Procurement of goods and services is considered a crucial issue, as evidenced by the discovery of irregularities in procurement in most companies. Procurement is the largest sector prone to corruption, with nearly 80 percent of cases handled by the Anti-Corruption Commission (CAC) originating in this sector.

If left unchecked, this fraud can be extremely dangerous for governments and organizations. A government or organization caught up in fraudulent practices can result in chaos, resulting in reputational damage, organizational losses, financial losses, and even the morale of government officials. Fraudsters typically engage in fraud knowingly, seeking personal or group gain.

One solution to prevent fraud in the procurement of goods and services is to implement e-procurement. According to Sutedi (2017:254), e-procurement is a website that is an auction system in government procurement of goods using internet-based technology, information, and communication tools. E-procurement aims to increase transparency and accountability, increase market access and unfair business competition, improve the efficiency of the procurement process, support the monitoring and audit process, and meet the need for real-time access to information. With e-procurement, the auction process can take place effectively, efficiently, competitively, transparently, fairly/non-discriminatory and accountably. Therefore, it is hoped that the implementation of e-procurement can be a way to overcome fraud in the procurement of goods and services that result in losses to state finances.

One of factors triggering fraud is opportunity. Widespread opportunities to commit fraud will not influence someone with a high level of organizational commitment. Research conducted by Virmayani et al. (2017) and Widiutami et al. (2017) found that organizational commitment had a positive effect on fraud prevention. Contrary results were obtained from research by Utama and Yuniarta (2020), which showed that organizational commitment had no effect on fraud prevention. Research by Sutoyo et al. (2023) also showed that organizational commitment had no effect on fraud prevention.

Besides the implementation of e-procurement and organizational commitment, there is another very important factor in influencing fraud prevention: human resource (HR) competence. Human resource competence describes the characteristics of knowledge, skills, behavior, and experience (abilities) possessed by humans to perform a particular job or role effectively (Wirawan, 2019:9). Therefore, if someone has adequate skills, knowledge, and abilities, it is usually easy to detect fraud that occurs because by having more knowledge or exceeding the person who committed the fraud, someone will be more sensitive to fraud that occurs around them.

These observations underscore the need for research titled: "The Implementation Of E-Procurement, Organizational Commitment, And Employee Competence on Fraud Prevention in the Procurement of

Goods and Services at EDTL, E.P. Dili, Timor-Leste." This study aims to explore the interplay of these factors in Fraud Prevention in Procurement Services.

II. LITERATURE REVIEW

A. Fraud Prevention

According to Rahimah et al. (2018), fraud prevention is the actions taken to eliminate or suppress fraudulent acts from occurring. According to Widiyarta (2018), fraud prevention in the procurement of goods and services can be interpreted as an action to suppress the factors that cause fraud by narrowing the room for fraud perpetrators to maneuver in managing the procurement of goods and services. According to Fitrawansyah (2014:16), fraud prevention is an activity to combat fraud at a low cost. Fraud prevention can be analogized to a disease, namely, prevention is better than cure.

B. E-Procurement

According to Willem (2016), e-procurement is the procurement of goods and services using electronic networks (internet or intranet) or electronic data interchange (EDI). According to Sutedi (2017), e-procurement is a website that is an auction system for government procurement of goods using internet-based technology, information, and communication tools. E-procurement is a business-to-business purchasing practice that uses e-commerce to find possible supply sources, purchase goods and services, transfer payments, and communicate with vendors (Nandankar & Sachan, 2020).

C. Organizational Commitment

Moorhead and Griffin (2013) stated that organizational commitment is an attitude that reflects the extent to which an individual knows and is attached to his organization. Individuals with high commitment are likely to see themselves as true members of the organization.

D. Employee Competence

According to Anwar & Komariyah (2017:143), competence consists of knowledge, skills, and attitudes. Knowledge is knowledge gained from formal learning and/or from training or courses related to the field of work being handled. Skill is having expertise in the field of work being handled and being able to handle it in detail, however, in addition to being an expert, he must have the ability to be able to solve problems and resolve them quickly and efficiently. Attitude is upholding organizational ethics and having a positive attitude (friendly and polite) in acting. This attitude cannot be separated from a person's duties in carrying out work properly, this is an important element for service businesses and even has an influence on the image of the company or organization.

III. METHODOLOGY

The conceptual framework in this study was developed to understand how three independent variables e-procurement implementation, organizational commitment, and employee competency influence the dependent variable, namely fraud prevention in the procurement of goods and services. The relationship between these variables is explained as follows:

- ✓ E-Procurement Implementation → Fraud Prevention
- ✓ Organizational Commitment → Fraud Prevention
- ✓ Employee Competence → Fraud Prevention

According to Sugiyono (2020:99), a hypothesis is a temporary answer to a research problem formulation. Therefore, the research problem formulation is usually structured as a question. It is said to be temporary because the answer provided is only based on relevant theory and not yet based on empirical facts obtained through data collection. Based on the problems outlined above and supported by several theories and conceptual frameworks, the following hypotheses are proposed in this study.

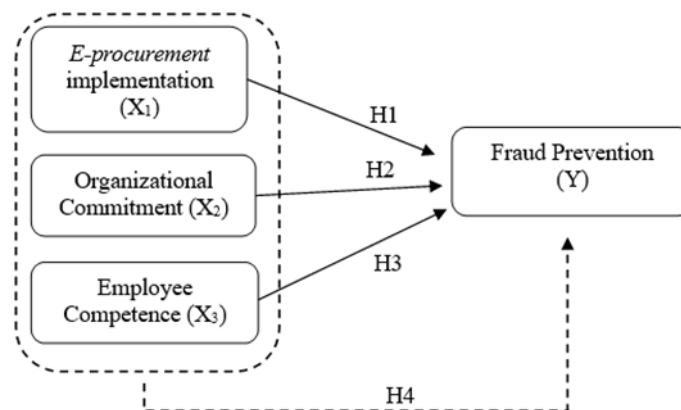


Figure 1. Research Framework

In this study, the research method employed is quantitative research, utilizing questionnaires as secondary data derived from a Likert scale, facilitating subsequent analysis. The research was conducted at EDTL, E.P. in Dili, Timor-Leste. According to Sugiyono (2020), the population represents a generalization area comprising objects or subjects that possess specific qualities and characteristics defined by the researcher. For this research, the population includes all employees of EDTL, E.P. were involved in the Procurement section in 2024-2025, totaling 59 individuals. The research instruments include validity and reliability, and the data analysis technique involves quantitative data analysis using descriptive and SPSS for windows release program

IV. RESULTS

E. Overview of the Research Objective

Electricidade de Timor-Leste Empresa Pública (EDTL, E.P.) is the Timor-Leste’s State-Owned Company in Electricity and Energy Sector, established based on the Decree Law No. 29/2020, of 22 July. EDTL, E.P. was established with the main objective to oversee and ensure the functioning of electricity sector based on the Timor-Leste’s Government Policy to accelerate public access to the electricity and supply of electricity in a large part of the national territory, create a set of structuring measures for a reform of the electricity sector aimed at the expansion and modernization of the National Electricity System, as well as the management implementation to improve public services provided, raising standards of quality and reliability at the affordable prices, taking into account the feasibility and sustainability of its operations. EDTL, E.P.’s business operation consists of Generation, Transmission, and Distribution of Electricity and in planning for the energy diversification to renewables in the energy sector.

F. Characteristics of Research Respondents

Respondent characteristics were used to determine the diversity of respondents based on gender, age, last education and length of employment.

Tabel 1. Characteristic by gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	28	47.5	47.5	47.5
	Woman	31	52.5	52.5	100.0
	Total	59	100.0	100.0	

More than half of the respondents placed in the procurement of goods and services at EDTL, E.P. Dili, Timor-Leste were female, namely 31 people (52.5%), while 28 people (47.5%) were male.

Tabel 2. Characteristic by age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 30 tahun	22	37.3	37.3	37.3
	31 - 40 tahun	21	35.6	35.6	72.9
	41 - 50 tahun	12	20.3	20.3	93.2
	> 50 tahun	4	6.8	6.8	100.0
	Total	59	100.0	100.0	

If viewed from the age of respondents based on age groups, the data in Table 2 shows that the number of respondents in the age group between 20-30 years is the largest (22 people), followed by the age group 31-40 years (21 people). While the age group with the fewest number of respondents is the age group >50 years (4 people).

Tabel 3. Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SLTA Sederajat	4	6.8	6.8	6.8
	Diploma	15	25.4	25.4	32.2
	S1	35	59.3	59.3	91.5
	S2	3	5.1	5.1	96.6
	S3	2	3.4	3.4	100.0
	Total	59	100.0	100.0	

The lowest level of education achieved by respondents was high school or equivalent and the highest was doctoral degree. More than half had a bachelor's degree, namely 35 people (59.3%), followed by respondents with a diploma education, as many as 15 people (25.4%), high school education, as many as 4 people (6.8%) and those with a master's degree as many as 3 people (5.1%) and doctoral education as many as 2 (3.4%). Table 3 shows the level of education of respondents.

Table 4. Length of Employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - 3 tahun	29	49.2	49.2	49.2
	3 - 5 tahun	13	22.0	22.0	71.2
	> 5 tahun	17	28.8	28.8	100.0
	Total	59	100.0	100.0	

Based on Table 4, it can be concluded that the respondents in this study have mostly worked for 1-3 years, as many as 29 (49.2%) respondents, and the rest have worked for 3-5 years as many as 13 (22.0%) respondents, and have worked for more than 5 years as many as 17 (28.8%) respondents. This shows

that in terms of length of service, the average respondent in this study, namely EDTL employees, E.P Dili Timor Leste, has worked for 1-3 years.

G. Validity and Reliability Testing

Table 5. Validity Testing

Variabel	Indicator	rx _{xy}	r-tabel	Criteria
<i>E-procurement Implementation (X₁)</i>	X1.1	0,715	0,256	Valid
	X1.2	0,807	0,256	Valid
	X1.3	0,794	0,256	Valid
	X1.4	0,799	0,256	Valid
	X1.5	0,742	0,256	Valid
	X1.6	0,835	0,256	Valid
	X1.7	0,592	0,256	Valid
	X1.8	0,793	0,256	Valid
	X1.9	0,672	0,256	Valid
	X1.10	0,625	0,256	Valid
	X1.11	0,747	0,256	Valid
	X1.12	0,760	0,256	Valid
	X1.13	0,720	0,256	Valid
	X1.14	0,768	0,256	Valid
	X1.15	0,726	0,256	Valid
	X1.16	0,639	0,256	Valid
Organizational Commitment (X ₂)	X2.1	0,689	0,256	Valid
	X2.2	0,695	0,256	Valid
	X2.3	0,736	0,256	Valid
	X2.4	0,622	0,256	Valid
	X2.5	0,498	0,256	Valid
	X2.6	0,720	0,256	Valid
	X2.7	0,634	0,256	Valid

Table 5. Validity Testing

Variabel	Indicator	rx _{xy}	r-tabel	Criteria
	X2.8	0,505	0,256	Valid
	X2.9	0,593	0,256	Valid
Employee Competence (X ₃)	X3.1	0,808	0,256	Valid
	X3.2	0,700	0,256	Valid
	X3.3	0,759	0,256	Valid
	X3.4	0,734	0,256	Valid
	X3.5	0,708	0,256	Valid
	X3.6	0,590	0,256	Valid
	X3.7	0,527	0,256	Valid
	X3.8	0,706	0,256	Valid
	X3.9	0,628	0,256	Valid
Fraud Prevention (Y)	Y1	0,729	0,256	Valid
	Y2	0,676	0,256	Valid
	Y3	0,772	0,256	Valid
	Y4	0,654	0,256	Valid
	Y5	0,721	0,256	Valid
	Y6	0,745	0,256	Valid
	Y7	0,718	0,256	Valid
	Y8	0,619	0,256	Valid
	Y9	0,701	0,256	Valid
	Y10	0,526	0,256	Valid
	Y11	0,629	0,256	Valid
	Y12	0,653	0,256	Valid
	Y13	0,636	0,256	Valid

From Table 5 above, it can be seen that the r_{xy} value > 0.256 , so that all questions in the questionnaire on the question items on the variables of e-procurement implementation, organizational commitment, employee competence and fraud prevention are valid.

Table 6. Reliability Testing

Variabel	Cronbach's Alpha	Kriteria	Remarks
<i>E-Procurement Implementation</i>	0,951	$\geq 0,60$	Reliabel
Organizational Commitment	0,879	$\geq 0,60$	Reliabel
Employee Competence	0,901	$\geq 0,60$	Reliabel
<i>Fraud Prevention</i>	0,924	$\geq 0,60$	Reliabel

From Table 6 above, it can be seen that the Cronbach's Alpha coefficient > 0.60 so that all questions in the questionnaire on the question items on the variables of e-procurement implementation, organizational commitment, employee competence and fraud prevention are reliable.

H. Descriptive Analysis

Table 7. Response to the E-procurement implementation variabel

Variabel	Indikator	Score					Σ Scor	Average X_1	Category	
		5 (SS)	4 (S)	3 (N)	2 (TS)	1 (STS)				
E- procurement implementati on (X_1)	$X_{1.1}$	F	23	31	3	1	1	251	4.25	Very high
		%	39.0	52.5	5.1	1.7	1.7	100		
	$X_{1.2}$	F	26	29	4	0	0	258	4.37	Very high
		%	44.1	49.2	6.8	0.0	0.0	100		
	$X_{1.3}$	F	25	29	5	0	0	256	4.34	Very high
		%	42.4	49.2	8.5	0.0	0.0	100		
	$X_{1.4}$	F	27	31	1	0	0	262	4.44	Very high
		%	45.8	52.5	1.7	0.0	0.0	100		

X _{1.5}	F	29	28	2	0	0	263	4.46	Very high
	%	49. 2	47. 5	3.4	0.0	0.0	100		
X _{1.6}	F	26	30	3	0	0	259	4.39	Very high
	%	44. 1	50. 8	5.1	0.0	0.0	100		
X _{1.7}	F	32	23	4	0	0	264	4.47	Very high
	%	54. 2	39. 0	6.8	0.0	0.0	100		
X _{1.8}	F	28	26	5	0	0	259	4.39	Very high
	%	47. 5	44. 1	8.5	0.0	0.0	100		
X _{1.9}	F	28	27	3	1	0	259	4.39	Very high
	%	47. 5	45. 8	5.1	1.7	0.0	100		
X _{1.10}	F	30	19	8	2	0	254	4.31	Very high
	%	50. 8	32. 2	13. 6	3.4	0.0	100		
X _{1.11}	F	31	25	3	0	0	264	4.47	Very high
	%	52. 5	42. 4	5.1	0.0	0.0	100		
X _{1.12}	F	31	23	5	0	0	262	4.44	Very high
	%	52. 5	39. 0	8.5	0.0	0.0	100		
X _{1.13}	F	26	26	6	0	1	253	4.29	Very high
	%	44. 1	44. 1	10. 2	0.0	1.7	100		
X _{1.14}	F	35	21	2	1	0	267	4.53	Very high
	%	59. 3	35. 6	3.4	1.7	0.0	100		
X _{1.15}	F	31	23	5	0	0	262	4.44	Very high

		%	52.5	39.0	8.5	0.0	0.0	100		
	X _{1.16}	F	30	24	3	2	0	259	4.39	Very high
		%	50.8	40.7	5.1	3.4	0.0	100		
Average variabel E-procurement									4.40	Very high

Overall, Table 7 shows that the average score for the E-procurement Implementation variable is 4.40 (very high), but the item scores vary considerably. This indicates that respondents tend to perceive that the E-procurement implementation provided by EDTL, E.P. Dili, Timor Leste, is quite successful.

Table 8. Response to the Organizational Commitment variabel

Variabel	Indikator	Score					Σ Score	Average X ₂	Category	
		5 (SS)	4 (S)	3 (N)	2 (TS)	1 (STS)				
Organizational Commitment (X₂)	X _{2.1}	F	23	28	6	2	0	249	4.22	Very high
		%	39.0	47.5	10.2	3.4	0.0	100		
	X _{2.2}	F	20	28	8	3	0	242	4.10	High
		%	33.9	47.5	13.6	5.1	0.0	100		
	X _{2.3}	F	23	30	5	1	0	252	4.27	Very high
		%	39.0	50.8	8.5	1.7	0.0	100		
	X _{2.4}	F	27	30	2	0	0	261	4.42	Very high
		%	45.8	50.8	3.4	0.0	0.0	100		
	X _{2.5}	F	16	27	14	1	1	233	3.95	High
		%	27.1	45.8	23.7	1.7	1.7	100		
	X _{2.6}	F	18	31	10	0	0	244	4.14	High

		%	30. 5	52. 5	16. 9	0.0	0.0	100		
X _{2.7}	F	15	27	12	5	0	0	229	3.88	High
	%	25. 4	45. 8	20. 3	8.5	0.0	100			
X _{2.8}	F	27	26	6	0	0	0	257	4.36	High
	%	45. 8	44. 1	10. 2	0.0	0.0	100			
X _{2.9}	F	23	27	6	3	0	0	247	4.19	High
	%	39. 0	45. 8	10. 2	5.1	0.0	100			
Average variabel Organizational Commitment									4.17	High

Overall, Table 8 shows that the average score for the organizational commitment variable is 4.17 (high). This indicates that respondents are committed to remaining at EDTL, E.P. Dili, Timor Leste.

Table 9. Response to the Employee Competence variabel

Variabel	Indicator	Score					Σ Skor	Average X ₃	Category	
		5 (SS)	4 (S)	3 (N)	2 (TS)	1 (STS)				
Employee Competence (X₃)	X _{3.1}	F	28	29	2	0	0	262	4.44	Very high
		%	47.5	49.2	3.4	0.0	0.0	100		
	X _{3.2}	F	34	22	3	0	0	267	4.53	Very high
		%	57.6	37.3	5.1	0.0	0.0	100		
	X _{3.3}	F	28	30	1	0	0	263	4.46	Very high
		%	47.5	50.8	1.7	0.0	0.0	100		
	X _{3.4}	F	34	22	3	0	0	267	4.53	Very high
		%	57.6	37.3	5.1	0.0	0.0	100		
	X _{3.5}	F	30	27	2	0	0	264	4.47	Very high
		%	50.8	45.8	3.4	0.0	0.0	100		

X _{3.6}	F	29	25	4	1	0	259	4.39	Very high
	%	49.2	42.4	6.8	1.7	0.0	100		
X _{3.7}	F	29	20	9	1	0	254	4.31	Very high
	%	49.2	33.9	15.3	1.7	0.0	100		
X _{3.8}	F	29	22	8	0	0	257	4.36	Very high
	%	49.2	37.3	13.6	0.0	0.0	100		
X _{3.9}	F	31	23	5	0	0	262	4.44	Very high
	%	52.5	39.0	8.5	0.0	0.0	100		
Average variabel Employee Competence								4.44	Very high

Overall, Table 9 shows that the average score for the organizational commitment variable was 4.44 (very high). This indicates that respondents are competent in their fields.

Table 10. Response to the Fraud Prevention variabel

Variabel	Indicator	Score					Σ Scor	Average Y	Category	
		5 (SS)	4 (S)	3 (N)	2 (TS)	1 (STS)				
Fraud Prevention (Y)	Y ₁	F	24	25	9	1	0	249	4.22	Very high
		%	40.7	42.4	15.3	1.7	0.0	100		
	Y ₂	F	20	30	8	1	0	246	4.17	Tinggi
		%	33.9	50.8	13.6	1.7	0.0	100		
	Y ₃	F	21	29	9	0	0	248	4.20	Very high
		%	35.6	49.2	15.3	0.0	0.0	100		
	Y ₄	F	27	21	10	0	0	255	4.32	Very high
		%	45.8	35.6	16.9	0.0	0.0	100		
	Y ₅	F	27	23	9	0	0	254	4.31	Very high
		%	45.8	39.0	15.3	0.0	0.0	100		
	Y ₆	F	20	28	9	1	1	242	4.10	Very high
		%	33.9	47.5	15.3	1.7	1.7	100		

Y. ₇	F	23	29	7	0	0	252	4.27	Very high
	%	39.0	49.2	11.9	0.0	0.0	100		
Y. ₈	F	27	23	9	0	0	254	4.31	Very high
	%	45.8	39.0	15.3	0.0	0.0	100		
Y. ₉	F	28	25	6	0	0	258	4.37	Very high
	%	47.5	42.4	10.2	0.0	0.0	100		
Y. ₁₀	F	27	15	13	3	1	241	4.08	High
	%	45.8	25.4	22.0	5.1	1.7	100		
Y. ₁₁	F	19	32	8	0	0	247	4.19	High
	%	32.2	54.2	13.6	0.0	0.0	100		
Y. ₁₂	F	26	24	9	0	0	253	4.29	Very high
	%	44.1	40.7	15.3	0.0	0.0	100		
Y. ₁₃	F	29	25	5	0	0	260	4.41	Very high
	%	49.2	42.4	8.5	0.0	0.0	100		
Average variabel Fraud Prevention								4.25	Very high

Overall, table 10 shows that the average score for the fraud prevention variable is 4.25 (very high). This indicates that fraud prevention efforts by EDTL, E.P. Dili, Timor Leste employees are high, as indicated by the commitment between management and company employees to implement anti-fraud activities, conduct periodic assessments, have automatic fraud detection procedures in the system, re-inspect incoming and outgoing goods, identify transaction classes, and etc

I. Regression Assumptions Testing / Classical Assumptoins

Tabel 11. Normality Testing

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		59
Normal Parameters ^{a, b}	Mean	.0067150
	Std. Deviation	.62335282

Most Extreme Differences	Absolute	.091
	Positive	.091
	Negative	-.088
Test Statistic		.091
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Based on the SPSS output table above, it is evident that the significance value Asymp. Sig. (2-tailed) is 0.425, which is greater than 0.05. Therefore, according to the decision-making criteria for the Kolmogorov-Smirnov normality test presented above, it can be concluded that the residual values are normally distributed. Consequently, the assumptions or requirements for the regression model have been met.

Tabel 12. Multicollinearity Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.301	.561		.537	.594		
	X1	.311	.136	.292	2.292	.026	.583	1.716
	X2	.282	.110	.283	2.563	.013	.779	1.284
	X3	.316	.139	.281	2.278	.027	.623	1.604

a. Dependent Variable: Y

Based on the results of the multicollinearity test using the VIF method, the VIF value < 10 and the Tolerance value > 0.10, meaning that all independent variables do not exhibit multicollinearity, so it does not bias the interpretation of the results of the regression analysis.

Table 13. Heteroscedasticity Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.530	.335		1.580	.120
	X1	-.105	.081	-.223	-1.298	.200
	X2	-.045	.066	-.102	-.685	.496
	X3	.096	.083	.193	1.159	.251

a. Dependent Variable: Abs_Res

Based on the results of the heteroscedasticity test using the Glejser Test, it can be seen that the significance value (Sig.(2-tailed)) > 0.05. This means that the estimated model is free from heteroscedasticity. Therefore, it can also be concluded that the regression model does not exhibit heteroscedasticity.

J. Multiple Regression Analysis

Table 14. Coefficients

No	Variabel	Coefficien t	t-test	Significancy	Standardized Coefficient (Beta)
00	Constant	0.301	0.537	0.594	-
01	<i>E-procurement</i>	0.311	2.292	0.026	0.292
02	Organizational Commitment	0.282	2.563	0.013	0.283
03	Employee Competence	0.316	2.278	0.027	0.281
R = 0.692 ^a		F hitung = 16.800			
Adjust R Square = 0.450		Signifikansi = 0,000			

a. Dependent Variable: Y

Thus, based on the results of the analysis in the table above, the regression model constructed is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3x_3+ e$$

$$Y = 0.301 + 0.311X_1 + 0.282X_2 + 0.316X_3$$

Based on the results of the multiple linear regression equation, the regression equation is interpreted as follows:

- Constant = 0.301, the variables e-procurement implementation, organizational commitment, and employee competency remain constant at zero (unchanged), so the magnitude of the change in the Fraud Prevention variable is 0.301.
- Coefficient X1 = 0.311, the e-procurement implementation variable increases by one point (unit), while organizational commitment and Employee Competence remain constant, resulting in a 0.311 increase in Fraud Prevention.
- Coefficient X2 = 0.282, the organizational commitment variable increases by one point (unit), while e-procurement implementation and Employee Competence remain constant, resulting in a 0.282 increase in Fraud Prevention.
- Coefficient X3 = 0.316, the Employee Competence variable experienced an increase of one point (unit), while the implementation of e-procurement and Employee Competence remained the same, it would cause an increase in Fraud Prevention of 0.316.

K. Partial testing (t test)-Hypotheses 1 to 3

Based on the results of the multiple linear regression model calculations as shown in Table 14 and/or in the regression equation, it can be seen that all parameters in each variable are positive. This indicates a positive relationship between each independent variable and the dependent variable. To prove the research hypothesis, or to determine whether each independent variable influences the dependent variable, the following criteria are used: if $t\text{-test} < t\text{-table}$ and the significance value is less than 0.05 ($\text{sig} < 0.05$), it can be concluded that the independent variable has a significant partial effect on the dependent variable. The following describes the proof of each hypothesis:

- Hypothesis 1 (The Effect of E-Procurement Implementation on Fraud Prevention)

Based on the t-test results in Table 5.11, the calculated t for variable X1, e-procurement implementation, is 2.292 with a significance level of 0.02, while the calculated t is 2.004 ($df = 59 - 2 = 57$). Because the significance value of 0.04 is smaller than the alpha value of 0.05 ($p < \alpha$), and the calculated t is greater than the calculated t ($2.292 > 2.004$), it can be concluded that the e-procurement implementation variable has a positive and significant effect on fraud prevention.

- Hypothesis 2 (The Effect of Organizational Commitment on Fraud Prevention)

Based on the t-test results in Table 5.11, the calculated t for the X2 Organizational Commitment variable is 2.563 with a significance level of 0.01, while the calculated t is 2.004 (df = 59-2 = 57). Because the significance value of 0.01 is less than the alpha of 0.05 ($p < \alpha$) and the calculated t is greater than the calculated t (2.563 > 2.004), it can be concluded that the implementation of Organizational Commitment has a positive and significant effect on fraud prevention.

➤ Hypothesis 3 (The Effect of Employee Competence on Fraud Prevention)

Based on the results of the t-test shown in Table 5.11, the variable X3 Employee Competence has a t-value of 2.278 with a significance level of 0.02, while the t-table value is 2.004 (df = 59 - 2 = 57). Since the significance value of 0.02 is smaller than the alpha value of 0.05 ($p < \alpha$) and the t-value is greater than the t-table value (2.278 > 2.004), it can be concluded that the employee competence variable has a positive and significant effect on fraud prevention.

L. Uji F (Uji Simultan) - Hipotesis 4

Table 15. Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.059	3	2.686	16.800	.000 ^b
	Residual	8.795	55	.160		
	Total	16.854	58			
a. Dependent Variable: Y						
b. Predictors: (Constant), X3, X2, X1						

Based on table 15, it can be seen that the significance number is 0.00 with a calculated F value of 16,800. Ftable with degree of freedom $df_2 = n - k = 59 - 4 = 55$, $\alpha = 5\% = 0.05$, then obtained $F_{table} = 3.16$. If the calculated F value > F_{table} then H_0 is rejected and H_a is accepted, and if the calculated F value < F_{table} then H_0 is accepted and H_a is rejected. The result is the calculated F value of 16,800 > $F_{table} 3.16$, it can be concluded that H_0 is rejected and H_a is accepted or there is a simultaneous significant influence of the e-procurement implementation variables (X1), organizational commitment (X2), employee competence (X3), on the dependent variable of fraud prevention (Y).

M. Coefficient of Determination

Table 16. Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.301	.561		.537	.594
	X1	.311	.136	.292	2.292	.026
	X2	.282	.110	.283	2.563	.013
	X3	.316	.139	.281	2.278	.027

a. Dependent Variable: Y

The coefficient of determination is used to measure the extent to which a model explains the dependent variable. The R2 value can be calculated using the formula:

$Kd = r^2 \times 100\%$. Table 15 shows that the adjusted value, commonly referred to as the coefficient of determination, is 0.450, meaning 45% of the variation in the strength and weakness of fraud prevention is due to the variables e-procurement implementation (X1), organizational commitment (X2), and employee competence (X3), while 55% is explained by other variables not included in this study. The standard error of estimate (SE) is 0.399.

N. Discussion

Based on the results of the analysis above, the following discussion can be made:

1) The effect of E-procurement Implementation on Fraud Prevention at EDTL, E.P Dili, Timor Leste

The results of the linear regression analysis show that the implementation of e-procurement has a significant effect on fraud prevention at EDTL, E.P Dili, Timor Leste (seen from the probability value (sig.) t-count (0.026) < Level of Significant (0.05) and t count is greater than t table (2.292 > 2.004)). This can be interpreted, if the implementation of e-procurement increases, then fraud prevention at EDTL, E.P Dili, Timor Leste will increase. The results of this study are in accordance with the research of Utami et al. (2020) and Yuliawati, et al. (2021) also stated that there is a positive and significant influence for the variable of E-Procurement Implementation partially on the prevention of fraud in the Procurement of Goods/Services.

Implementing an e-procurement system can have a significant impact on preventing fraud in the procurement of goods and services. E-procurement solutions can help reduce corruption by addressing key factors contributing to fraudulent activities, such as monopoly power, information asymmetry, and a lack of transparency and accountability. (Neupane et al., 2014). By centralizing the procurement process and establishing a clear digital footprint, e-procurement can increase transparency and make it more difficult for individuals to abuse their authority or engage in collusive behavior. (Wicaksono et al., 2017).

E-procurement increases transparency in the procurement process by providing open access to tender information, technical specifications, bid prices, and evaluations of goods/service providers. This transparency reduces the possibility of collusion, price markups, and corrupt practices in procurement. E-procurement systems enable automatic verification of goods/service providers' administrative and technical documents, thereby reducing the opportunity for document falsification. Furthermore, the system can identify potential conflicts of interest by detecting relationships between procurement officials and bidders.

2) *The effect of Organizational Commitment on Fraud Prevention at EDTL, E.P Dili Timor Leste*

The results of the linear regression analysis indicate that organizational commitment significantly influences fraud prevention at EDTL, E.P. Dili, Timor Leste (as seen from the probability value (sig.) of the t-count ($0.013 < 0.05$) and the calculated t-count greater than the t-table ($2.563 > 2.004$)). This implies that if organizational commitment increases, fraud prevention at EDTL, E.P. Dili, Timor Leste will increase. These results align with research by Yusni (2022) and Leatemia & Febryanti (2020), which also states that organizational commitment positively influences fraud prevention in goods/services procurement.

Fraud is a serious threat to organizations, both in the public and private sectors. Fraud prevention is a priority in corporate risk management. One factor that has the potential to influence the effectiveness of fraud prevention is organizational commitment (Meutia, 2021). Organizational commitment refers to the extent to which employees feel loyalty, emotional attachment, and responsibility towards the organization's values and goals. High organizational commitment is believed to reduce an individual's tendency to commit fraud, as those with high commitment are more likely to act in accordance with the organization's ethics and values.

Employees who feel emotionally attached to an organization tend to have high integrity and behave ethically. They feel a responsibility to maintain the organization's reputation, making them reluctant to

commit fraud. Strong ethical norms can act as a bulwark against fraudulent activities. Dependence on the organization makes individuals more likely to follow applicable rules and procedures.

3) *The effect of Employee Competence on Fraud Prevention at EDTL, E.P Dili Timor Leste*

The results of the linear regression analysis show that employee competence has a significant effect on fraud prevention at EDTL, E.P Dili, Timor Leste (seen from the probability value (sig.) t-count (0.027) < Level of Significant (0.05) and t count is greater than t table (2.278 > 2.004)). This can be interpreted, if employee competence increases, fraud prevention at EDTL, E.P Dili, Timor Leste will increase. The results of this study are in accordance with the research of Widodo & Cahyaningrum (2023) and Yuliawati, et al. (2021) which states that there is a positive and significant influence for the Competence variable on Goods/Services Procurement Employees.

Fraud prevention in the procurement of goods and services refers to efforts to avoid fraudulent practices such as collusion, price markups, conflicts of interest, and abuse of authority. This prevention is carried out through the implementation of a strong internal control system, transparency, and compliance with regulations (Widiyarta, 2018). Competence refers to the combination of knowledge, skills, and attitudes possessed by individuals to carry out their duties effectively and efficiently. In the context of procurement of goods and services, competence includes an understanding of regulations, policies, and procedures, as well as analytical skills and a high level of professional ethics.

Individuals with high competency tend to have a better understanding of the rules and regulations in the procurement process, enabling them to identify potential irregularities. Skills in data analysis enable them to detect anomalies or indications of fraud more quickly. A strong understanding of the code of ethics and integrity values encourages individuals to act more professionally and avoid corrupt practices. Greater competency enables procurement managers to implement stricter oversight systems and increase transparency at every stage of the procurement process.

4) *The effect of E-procurement Implementation, Organizational Commitment and Employee Competence on Fraud Prevention at EDTL, E.P Dili Timor Leste*

The results of the Linear Regression analysis show that the implementation of e-procurement, organizational commitment and employee competence together have a significant effect on fraud prevention at EDTL, E.P Dili Timor Leste (probability value (sig.) F-count (0.000) < Level of Significant (0.05)). This can be interpreted, if the implementation of e-procurement, together, then fraud prevention at EDTL, E.P Dili Timor Leste has increased.

E-Procurement is an electronic system for procuring goods and services that increases transparency and accountability. Proper implementation of e-Procurement can reduce opportunities for fraud, such

as collusion, price markups, and document falsification (Akbar et al., 2019). Organizational commitment reflects the extent to which management and employees maintain integrity in carrying out the procurement process. A strong organizational commitment to the values of transparency and accountability can prevent fraudulent practices (Yusni, 2022). The competence of human resources in procurement significantly determines the effectiveness of fraud prevention. Employees who have a good understanding of procurement regulations, procedures, and systems are better able to identify and prevent fraud (Cahyani, 2019).

E-Procurement implementation, organizational commitment, and competence interact and contribute to fraud prevention more effectively than each factor alone. With the combination of these three factors, it is hoped that procurement of goods and services will become more transparent, accountable, and free from fraud. This is supported by Soudry (2007) who stated that transparency through e-procurement will be more effective if supported by a strong organizational culture and competent workforce.

V. CONCLUSION AND SUGGESTION

O. Conclusion

Based on the results and discussion in chapter five, the researcher concluded that:

- The overall implementation of e-procurement is in the very high category, the overall organizational commitment is in the high category, the overall employee competency is in the very high category, and fraud prevention at EDTL, E.P Dili Timor Leste is in the very high category.
- The implementation of e-procurement has a positive and significant impact on fraud prevention in EDTL, E.P. Dili, Timor Leste. This indicates that the increasing implementation of e-procurement within the company is followed by better fraud prevention, thereby increasing transparency and accountability in the procurement process and reducing the opportunity for fraud.
- Organizational commitment has a positive and significant effect on fraud prevention in EDTL, E.P. Dili, Timor Leste. This indicates that the stronger the organizational commitment of employees in their organization, the higher the level of fraud prevention.
- Employee competence has a positive and significant impact on fraud prevention at EDTL, E.P. Dili, Timor Leste. This indicates that adequate employee competence enables the

execution of tasks professionally and in accordance with standards, thus supporting fraud prevention efforts within the company.

- The implementation of e-procurement, organizational commitment and employee competence simultaneously have a positive and significant effect on fraud prevention at EDTL, E.P Dili, Timor Leste.

P. Suggestions

There are several suggestions that need to be considered in this study, including the following:

- The implementation of e-procurement owned by EDTL Company, E.P Dili Timor Leste is in the very high category so this must be more sustainable, so that the use of technology to simplify the procurement process of goods and services in the company can help employees be more effective, efficient and can cut administrative time so that request submissions, vendor searches, and approval processes can be done online. The use of this system also reduces manual investment, so that administrative work such as document management and supervision can be more efficient, tracking and auditing are easier all transactions can be recorded digitally. All parties involved in the procurement can access the same information, which reduces the possibility of hiding information or unfairness in the procurement process. By utilizing the e-procurement system, EDTL Company, E.P Dili Timor Leste can optimize procurement management, speed up processes, and reduce costs, which ultimately contribute to better and more efficient company performance. It also helps the company comply with regulations, ensure transparency, and optimize relationships with suppliers.
- The organizational commitment of EDTL, E.P. Dili, Timor Leste employees is in the high category, so this needs to be maintained, but the company is also expected to involve employees more in solving existing problems in the company. This is done so that employees have a sense of ownership of the company so that employees feel worried if they have to leave the company. The company is also more open if employees are negligent in carrying out responsibilities by providing reprimands. So, employees feel that the company has attention to employees and the company cares and is proud of employee performance.
- The competency of EDTL, E.P Dili Timor Leste employees is in the very high category so this needs to be maintained, considering the high score on the employee competency variable, it is important to continue to improve the quality of training and education for

employees, especially those directly involved in the e-procurement process. Training that focuses on technical skills, understanding regulations, and work ethics is very necessary to ensure employees remain competent in facing challenges and minimizing the potential for fraud. Although employee competency is already high, a sustainable competency development program must continue to be implemented. Conduct employee competency evaluations periodically to ensure performance standards are maintained

- EDTL, E.P Dili Timor Leste must continue to improve and maintain the implementation of e-procurement, organizational commitment, and existing employee competencies so that the reputation that has been maintained will continue to be good in the future and can also improve fraud prevention. This is necessary because of the Company's situation in improving the company's image in the community.

REFERENCES

- Ariastini, N. K., Yuniarta, G. A., & Kurniawan, P. S. (2017). Pengaruh Kompetensi Sumber Daya Manusia, Sistem Pengendalian Internal Pemerintah, Proactive Fraud Audit, dan Whistleblowing System Terhadap Pencegahan Fraud Pada Pengeloan Dana BOS Se-Kabupaten Klungkung. *e-Jurnal S1 Ak Universitas Pendidikan Ganesha*, 8 (2), 1-10.
- Arikunto, S. (2013). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Artantri, L. P. R. M., Handajani, L., and Pituringsih, E. (2016). The Role of E-Procurement in *Fraud Prevention in Local Government Goods/Services Procurement* on Lombok Island. 10(1), 16-32.
- Bastian, I. (2015). *Akuntansi Sektor Publik: Suatu Pengantar*. Yogyakarta: Erlangga.
- Devece, C., Palacios-Marqués, D. & Pilar Alguacil, M., (2015). Organizational Commitment and Its Effects on Organizational Citizenship Behavior in a high-unemployment environment. *Journal of Business Research*.
- Edison E, Anwar, Y., Komariyah, I. (2017). *Manajemen Sumber Daya Manusia*. Alfabeta, Bandung
- Ghozali, I. (2021). *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 26*. Edisi 10. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, D.N., & Dawn C.P. (2015). *Dasar-Dasar Ekonometrika*. Edisi 5 Buku 2. Jakarta: Salemba Empat.
- Karyono. (2013). *Forensic Fraud*. Yogyakarta: CV. Andi.
- Laksmi, P. S. P., & Sujana, I. K. (2019). Pengaruh Kompetensi SDM, Moralitas dan Sistem Pengendalian Internal Terhadap Pencegahan Fraud Dalam Pengelolaan Keuangan Desa. *E-Jurnal Akuntansi Universitas Udayana*, 26(3), 2155-2182.
- Luthans, F. (2015). *Perilaku Organisasi*. Edisi ke-10. Andi Offset. Yogyakarta.
- Robbins, S.P. (2016). *Organizational Behavior*, New Jersey: Printice Hall International Inc.
- Romaisah, Imtikhanah, S., and Hidayah, R. (2017). *Effect of Implementation of E-Procurement Systems and Internal Control on Prevention of Government Procurement of Goods/Services Fraud*. *Journal of Muhammadiyah University of Pekajangan Pekalongan*, 15(2), 65-80.
- Ruslan. (2013). *Metode Penelitian Public Relations dan Komunikasi*. Jakarta: Raja Grafindo Persada
- Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta, CV.
- Sutedi. A. (2012). *Good Corporate Governance*. Jakarta: Sinar Grafika
- Virmayani, Putu Crysma. 2017. Pengaruh Kesesuaian Kompensasi, Asimetri Informasi, Budaya Etis Organisasi dan Komitmen Organisasi Terhadap Kecenderungan Kecurangan (Fraud) Akuntansi Pada Koperasi Simpan Pinjam Se-Kecamatan Buleleang. *e-Jurnal S1 Ak Universitas Pendidikan Ganesha Jurusan Akuntansi*, 7(1): 720-732.

Widiutami, Ni Putu Sri., Sulindawati, Ni Luh Gede Erni., dan Atmadja, Anantawikrama Tungga. 2017. Pengaruh Efektivitas Pengendalian Internal, Ketaatan Aturan Akuntansi, Dan Komitmen Organisasi Terhadap Kecenderungan Kecurangan (Fraud) Akuntansi (Studi Empiris Pada Lembaga Perkreditan Desa di Kabupaten Buleleng). *E-Journal S1 Ak Universitas Pendidikan Ganesha Jurusan Akuntansi Program S1*(Volume 7 No. 1 Tahun 2017).

Willem, S. (2016). *Manajemen Pengadaan (Procurement Management)*. IN Media.

Wirawan. (2019). *Evaluasi Kinerja Sumber Daya Manusia*, Jakarta: Salemba. Empat.