Factors Affecting the Likelihood of Fraudulent in Procurement Process: the Case of Royal Malaysian Air Force

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Abstract

Procurement encompasses activities and processes of purchasing good products and services in the public or private sector. It has been reported that 60% of fraud and economic crime perpetrators in the public sector were from government officials. Procurement fraud has increased in the public sector since 2012. This study aims to investigate the practice and likelihood of fraud in the Royal Malaysian Air Force (RMAF) procurement process and to recommend the course to improve the effectiveness of implementing the e-procurement system. This study employed a quantitative method to achieve the objectives of the research. This study adopted a questionnaire from previous research instruments used in many studies related to fraud intention as the primary data collection method. The questionnaire was distributed to the selected officers and other ranks within RMAF. The respondents were among all officers and employees involved directly in the procurement process. Using quantitative research for the data collection method allowed the researcher to evaluate and understand this data through statistical analysis. This study's findings revealed that work commitment, capability, and opportunity had a significant association with the likelihood of fraud in the RMAF e-procurement system when Pearson's correlation was used. Results from regression analysis addressed that capability and opportunity significantly influence the possibility of fraud.

Keywords: Royal Malaysian Air Force, e-procurement, likelihood of fraud, work commitment, capability, opportunity

1. Introduction

1.1 Background of the Study

The e-procurement system has been identified as one of the mediums in the business process of the supply chain. E-procurement is an electronic or online system with information technology capabilities, and it also can be called e-business. To improve public service delivery, the government of Malaysia has welcomed the initiative to use e-Government for many of its operations. The launch of e-Government under the Multimedia Super Corridor (MSC) in 1997 and the implementation of electronic procurement (e-procurement), known as e-Perolehan, was the first step to improve government purchasing concerns. According to Haron, Abdul Rahman, Othman, Shu Hui, & Omar (2011), e-Perolehan allows the ministries to electronically select items to be procured from the desktop, initiate an electronic approval process, and create, submit, and receive purchase orders, delivery orders, and other related documents electronically. Oliveira and Amorim (2001) defined e-procurement as the process of electronically purchasing the goods and services which were needed for an organisation's operations. According to Nawi, Roslan, Salleh, Zulhumadi, and Harun (2016), by switching from conventional to electronic procurement, the company can streamline regulatory procedures, reduce administrative burdens, and still adhere to legal requirements. The statistics of the Malaysian Anti-Corruption Commission (MACC) Report by the National Audit Department has shown that e-procurement reduces fraudulent activities.

Period of Years	Investigated	Accused	Reported (MACC)
2006 - 2008	150	19	13
2009 - 2011	54	4	12
2012 - 2014	31	2	11
2015 - 2019	12	8	8
Total	247	33	44

Table 1. Statistics of Mala	vsian Corruption	Commission Actio	n Over Report
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Source: MACC (2020)

There are many benefits of e-procurement. Using such a system in the government has positively impacted government performance and country growth by reducing costs on government purchasing, increasing value for money, reducing corruption, increasing trust in government, and encouraging growth. According to Rizki (2018), e-procurement benefits the organisation from improved implementation, such as contract compliance, increased management information, and reduced transaction cost and time spent. Some corrupt officials are vulnerable to corruption due to power, opportunity, pressure, and rationalisation factors.

The public sector needs to be aware of these tactics and actively consider reviewing the existing internal control policies, undertaking risk assessment reviews, updating the detection mechanism, and putting best practices in place. The consequences of procurement fraud may be not only high costs but also tax-payers money being wasted and value being diminished, and imperiling personal safety, image, and organisational capability.

1.2 Problem Statement

Military procurement is highly prone to corruption for several reasons. First, for security reasons, governments tend to be the least transparent in spending on defence. This alone creates opportunities for project misallocation. Furthermore, military equipment is usually highly specialized, reducing market entry and competition among suppliers and buyers. Since major arms are expensive and complex, prices vary highly, thus providing a window for corruption. The highly specialised nature of military goods, large profit margins, and lack of market competition set the stage for bribe-taking, collusion, and misallocation.

The government of Malaysia needs to ensure that Royal Malaysian Air Force (RMAF) assets are still relevant, and that the operational readiness of all assets is maintained at an optimal level. To achieve operational readiness, the RMAF currently focuses on acquiring new platforms under the light combat aircraft program to replace obsolete aircraft. On June 2021, the Malaysian Defence Ministry launched a program tender to enhance Malaysia's air defence and air strike capability.

In the previous supplying defence scandals, several military officials were investigated, arrested, trialed, and sentenced guilty of being involved in fraudulent activities. In the aircraft engine scandal, evidence of fraud in procurement was uncovered in the RMAF. The procurement fraud scandals have raised concerns about governance practices and proven the occurrence of fraud in procurement in RMAF. The statistics of the MACC from the year 2010 to 2022 show reports of fraud and corruption among public servants, including RMAF. In 2010, there was the scandal of the loss F-5E jet engine belonging to RMAF. In 2017, an RMAF Officer with the rank of Major was brought on charges of accepting a bribe amounting to RM1,500.00, and two RMAF Officers were accused of obtaining a bribe in the form of two checks amounting to RM1.8 million. Defeating defence corruption could be a notoriously difficult endeavour, but it is a pre-condition for regaining societal confidence. The ability of RMAF to focus on increasing the transparency and integrity of the procurement procedure will enhance the integrity of all e-procurement processes and change the behaviour of the stakeholders in RMAF. However, there is limited research on how e-procurement effectively reduces fraudulent activities in the RMAF.

Reducing fraud in procurement is an ongoing concern for RMAF. Issues of accountability, transparency, corruption, integrity, and cronyism in e-procurement are rising. The public is concerned about properly managing tax-payers funds and keeping the wastage minimal. Thus, RMAF needs to acknowledge and improve the monitoring mechanism to increase the effectiveness of the allocation's utilisation and, therefore, to ensure as little leakage as possible.

1.3 Research Objectives

This study aims to achieve the following:

(1) To study the influence of work commitment and the likelihood of e-procurement fraud in the RMAF.

(2) To examine the influence of capability and the likelihood of e-procurement fraud in the RMAF.

(3) To investigate the influence of opportunity and the likelihood of e-procurement fraud in the RMAF.

1.4 Research Questions

The objective of this study was to examine the relationship between work commitment, capability, and opportunity; and the likelihood of fraud in the RMAF. Therefore, the following research questions have been constructed:

(1) Is there any relationship between work commitment and the likelihood of fraud in the RMAF?

(2) Is there any relationship between capability and the likelihood of fraud in the RMAF?

(3) Is there any relationship between opportunity and the likelihood of fraud in the RMAF?

2. Literature Review

This section reviews past literature on the relationship between work commitment, capability, and opportunity toward the likelihood of fraud in the procurement system.

2.1 Relationship between Work Commitment and Likelihood of Fraud

Previous research on e-procurement attests to the critical role of leadership commitments, with the success of e-procurement being highly dependent on management performance (Suliantoro & Ririh, 2019). If the top leader strategically supports e-procurement, the organisation can facilitate its development. The higher the commitment of the authorities in developing e-procurement, the more successful will the adoption of the technology be. Strong support from the top level will further facilitate the implementation of e-procurement in the form of desire from within the organisation to maintain an effective e-procurement process. A leader with high affective commitment will demonstrate trust in the organisation, and accept organisational goals and values. If the commitment of the leadership includes the process of internalisation into organisational practices, then this commitment will be an organisational value trusted by all members of the organisation. This value will then encourage members of the organisation to behave towards a particular object.

The finding of previous research showed that the desire for wealth was negatively influenced by pay satisfaction. A satisfied employee is less likely to engage in fraud or unethical workplace behaviour. Another previous research by Wicaksono (2016) found that employees who committed to the organisation maintained their membership in the organisation. Workers very committed to the organisation will maintain their good reputation there and care deeply about it. Workers will work to keep the company in good shape and do all in their power, even committing fraud, to improve its image. Employees will keep the organisation in good shape and want to provide their best performance so that employees can do everything, including frau,d to make the organisation look better. In an organisation, an employee's ethical behaviour is strongly influenced by a leader who practices ethical behaviour, such as trust. It provides awareness of leadership responsibilities to affect the employee's organisational commitment (Aryati et al., 2018).

Organisations with a strong organisational commitment will promptly report such fraud since fraud may impede the organisation from achieving its objectives. Furthermore, a favourable work environment creates better creativity, ethical behaviour, and performance of employees which generates job satisfaction and is negatively related to corruption. A favourable, conducive, comfortable, and mutual respect among employees will encourage workers to act morally and reduce the chance that they will commit fraud. This research attempted to examine the organisational commitment to fraud intention and to understand how the organisational environment influenced employees to perform ethical or unethical behaviour. Therefore, the current research proposes:

Hypothesis 1: Work Commitment is negatively related to the likelihood of e-procurement fraud.

2.2 Relationship between Capability and Likelihood of Fraud

Previous studies addressed that capability positively affects fraud behaviour (Sujana et al., 2018; Wolfe & Hermanson, 2004). Large-scale frauds are unlikely to occur if no certain people with special capabilities exist within the organisations. Wolfe and Hermanson (2004) believed that there were six essential traits in the personality of perpetrators: position or function, brain, confidence or ego, coercion skills, effective lying, and immunity to stress. According to Magdalena and Dananjaya (2021), fraud will not occur without the right people who can commit fraud

in detail. It also means that fraud will not occur without people who have special abilities. People who can commit fraud within their job specifications are those who have the ability as well as experience to penetrate the internal controls, develop sophisticated embezzlement strategies, and be able to control them, bringing benefits for themselves.

In another study, Baz, Samsudin, Che Ahmad, and Popoola (2016) argued that fraud perpetrators must possess the mindset, skills, and knowledge to commit fraud. The study found that the capability to commit fraud can hardly be removed. In the procurement process, the opportunity to commit fraud is only known by employees with authority (position, function, official access) in procurement activities. The employee can arrange the tender process, determine the vendor who will accept the contract, and determine the number of goods/services needed. Procurement officials can help win a contract for a company with affiliations with public officials or certain politicians. This position or function can facilitate a procurement official to commit fraud to gain power and wealth (Rustriani, 2019). Furthermore, capability means that the individual must be confident to weigh the benefits and costs of giving and taking bribes. If individuals believe that benefits are perceivably higher than the sanctions, it is difficult to combat the corruption desire.

However, fraud can scarcely be perpetuated when there is no opportunity to utilize their capability. Adequate supervision is significantly able to control or minimize the impact by instilling standards and blocking loopholes in the systems as well as coordinating activities based on design. This research attempted to examine the capability of fraud intention and understand how capability influenced employees to perform ethical or unethical behaviour. Therefore, the current research proposes the following:

Hypothesis 2: Capability positively influences the likelihood of e-procurement fraud.

2.3 Relationship between Opportunity and Likelihood of Fraud

According to a study by Said, Asri, Rafidi, Obaid, and Alam (2018), many previous studies reported that the perpetration of fraudulent behaviour was associated with the opportunity. Opportunity refers to weak internal control that exists in an organisational environment. A lack of duty separation and inadequate monitoring also facilitates fraud. Workplace inefficiencies are the reason for dishonest behaviours like embezzlement and loan manipulation. Employees who have the opportunity to perpetrate fraud do so because they believe their chances of being caught are small. Islam and Alharthi (2020) addressed that ethics is a substantial concern in realizing sustainable procurement and is an ethical climate concerning responsibility. In understanding the utilitarian ethical model, the most ethical choice is the one that will generate and maximize the greatest good for the most significant number. This means that the utilitarian climate encourages employees of an organisation to assess their activities and roles into a broader framework of possibilities through the benevolent climate and to be socially responsible; this is also of interest to outside stakeholders. According to the prevailing utilitarian perceptions, community-focused and employee-focused ethical climates could significantly and positively support the adoption of ethical purchasing behaviour in e-procurement.

Without opportunity, a fraudulent act is impossible. In other words, a fraudster needs to think of ways to exploit their position to solve a financial issue with little chance of being discovered. The ability to commit fraud is not limited to a person's position. Typically, the lack of adequate internal controls at work and the slim risk of detection presents an alluring opportunity for fraudulent behaviour. Wolfe and Hermanson (2004) addressed that opportunity generally arises due to weak internal control or system in an organisation. Another opportunity in fraud is the notion that there is little chance of being detected after engaging in fraud and that being caught is not a big issue. Because of the law's numerous shortcomings and lax application, corruption among government procurement authorities happens in many developing countries (Rustiarini et al., 2019). It is further emphasised that government rules and regulations foster corruption and provide public employees room to use their discretionary authority. Sujana et al. (2018) show that opportunities positively affect fraud behaviour. Furthermore, according to the KPMG (2013) survey, internal control gaps, lack of competency to spot fraud, lack of training, and the industry's vulnerable structure are among the most significant workplace factors that can lead to fraud and unethical behaviour.

The current study attempted to examine the opportunity for fraud intention and understand how opportunity influenced employees to perform ethical or unethical behaviour. Therefore, the current research proposes the following:

Hypothesis 3: Opportunity positively influences the likelihood of e-procurement fraud.

2.4 Conceptual Framework

The current research developed independent variable relationships derived from previous studies and proposed a research conceptual framework, as discussed, based on the theory and previous research. The independent variables tested for the likelihood of fraudulent were organisational commitment, capability, and opportunity, as shown in the diagram below:



Figure 1. Conceptual framework

3. Methodology

This section presents the research design, population, and sample of the study. Research instruments and measurements of the variables are also discussed in this section.

3.1 Research Design, Population, and Sample

The current study was cross-sectional, employing a quantitative methodology to gain information from participants. The participants were expected to provide various perceptions on the effectiveness of the e-procurement system used in the RMAF for fraud prevention. The population or sampling frame was done by listing the number of officers and other ranks at the RMAF Headquarters and Air Force bases directly involved with the e-procurement process. 180 Officers and Other ranks were involved with the procurement process currently serving at the RMAF Headquarters and 11 Air Force bases.

The questionnaire was sent through WhatsApp, Telegram, and email. Participants involved in this research consisted of three tiers that the researcher broke down into three groups. Top Management typically included Lieutenant Colonel and Major, while Middle Management included Captain and Lieutenant. These two levels consisted of officers only. For Procurement Staff which consisted of other rank or low-level management, participants typically had the rank of Corporal to Warrant Officer.

3.2 Research Instrument

The dependent variable was the likelihood of fraudulent cases. The independent variables tested for the likelihood of fraud were organisational commitment, capability, and opportunity. All items' measurements were assessed using a five-point Likert scale where scale 1 = strongly disagree and scale 5 = strongly agree. The items for measurement are presented below.

The questionnaire was created with two divisions. The demographic profile of the respondents was the focus of Section A. Six questions were included in this section to gather the demographic profile of the respondents. The respondents were asked to answer questions about their age, gender, position, rank, academic qualification, and length of service. The elements in Section B were dependent variables and independent variables.

Name of variable	Definition	Source		
Likelihood of Fraudulent	to measure the intention of employees to perform unethical behaviour (fraud)	Robinson and Bennet (1995)		
Work Commitment	to measure the loyalty of employees in the organisation and employees' contribution to the organisation	Mowday, Steers, and Porter (1979)		
Capability	to measure the ability of employees to perform ethical or unethical behaviour	Omar and Mohamad Din (2010)		
Opportunity	to measure the effectiveness of red flags in detecting fraud	Omar and Mohamad Din (2010)		

Table 2. Measurement of variables

4. Analysis and Results

4.1 Demographic Profile

The respondents' demographic profile was collected using a Google Forms questionnaire. This study has set the main criteria that the respondent must be an RMAF personnel, currently working as procurement staff, and involved directly in the procurement process. Out of 180 questionnaires distributed, 157 responses were received for further analysis.

The SPSS descriptive analysis frequency function was used to find frequency distributions of the data collected. The results are presented below in Table 3.

Table 3. Demographic profile of the respondents

Category	Frequency	Percentage	
AGE			
Below 20 years old	3	1.9	
21 - 29 years old	67	42.7	
30 - 39 years old	71	45.2	
40 - 49 years old	16	10.2	
GENDER			
Male	133	84.7	
Female	24	15.3	
POSITION			
Top Management	5	3.2	
Middle Management	76	48.4	
Procurement Staff	76	48.4	
RANK			
Lt Col RMAF and Major RMAF	12	7.6	
Captain RMAF and Lieutenant RMAF	39	24.8	
Corporal RMAF to Air Warrant Officer	106	67.5	
ACADEMIC QUALIFICATION			
Master's Degree	5	3.2	
Bachelor's Degree	39	24.8	
Diploma	24	15.3	
SPM/STPM	89	56.7	
WORKING EXPERIENCE			
1 - 5 years	51	32.5	
6 - 10 years	37	23.6	
11 - 15 years	33	21.0	
More than 15 years	36	22.9	

Most respondents (45.2%) were between 30 and 39, while 42.7% were between 21 and 29. Of the remaining respondents, 10.2% were 40-49 years old, 1.9% were below 20, and 0.6% were above 50. Table 3 shows that 133 respondents (84.7%) are males, and 24 (15.3%) are females. This percentage is logical considering the percentage difference, which is quite far, between male and female personnel in the RMAF. It is estimated that the number of males is much higher than that of female personnel. Table 3 also exhibited that most respondents are from middle management and procurement staff, with both showing 48.4%. Only 3.2% of respondents were from top management. Referring to table 3 shows that 106 respondents (67.5%) are from Corporal RMAF and Air Warrant Officer rank. Other respondents were from Lt Col RMAF and Major RMAF (7.6%) and Captain RMAF and Lieutenant RMAF rank (24.8%). This percentage has a relationship with the level of management. Usually, the rank of Lt Col and Major are the top-level management, the ranks of Captain and Lieutenant are the middle-level management, and the rank of Corporal to Air Warrant Officer is the procurement staff. Most respondents had the highest academic qualification SPM (56.7%). The second was a bachelor's degree (24.8%), and the third was Diploma (15.3%). It showed that the respondents had a qualified education related to the management level, working area, and rank structure. Referring to the above table, 32.5% of the respondents had experiences of 1 to 5 years, 23.6% had working experienced between 6 to 10 years while 22.9% had working experience of more than 15 years, and 21% had working experience between 11 to 15 years. Therefore, it shows the procurement work is suitable for those new to this technology. This result also shows that the years of working experience are related to the rank structure. The respondents at the rank of Corporal, Captain, and Lieutenant typically had working experiences of 1 to 5 years and 6 to 10 years. Air Warrant Officers, Lt Col, and Majors normally had working experience of more than 15 years.

4.2 Descriptive Statistics

The lowest, maximum, mean, and standard deviations were determined. All variables were presented with descriptive statistics. The minimum, maximum, means and standard deviation values obtained from three items in the questionnaire were used as the dependent variable for the Likelihood of Fraudulent Cases (LF). Independent variables were also calculated in terms of the means for other dimensions, including work commitment (WC), capability (CAP), and opportunity (OPP). The lowest, maximum, and standard deviation values were derived by averaging the responses of 157 respondents.

Table 4. Descriptive statistics of the variables

	Ν	Min	Max	Mean	Std. Deviation
Likelihood of Fraudulent Cases (LF)	157	1	5	2.50	1.13
Work Commitment (WC)	157	1	5	3.82	0.912
Capability	157	1	5	2.926	1.096
Opportunity	157	1	5	2.97	1.02

The results in Table 4 represent the min, max, mean, and standard deviation scores of the likelihood of fraud. LF items measure respondents' agreement to the statement related to the likelihood of fraud, including the tendency to misuse privilege, staff going against leaders' decisions, accepting kickbacks, etc. The mean score of LF is 2.50 representing the officers and staff involved directly in the e-procurement process's tendency towards disagreement with the statement in the dimension. The respondents were asked nine questions about their work commitment (WC). The mean score for WC was 3.82, indicating that most respondents agree with the items measuring WC. The respondents agree that they care for the organisation and are willing to put in much effort beyond what is normally expected to help it succeed. According to Table 4, the respondents were questioned about their capability (CAP). CAP depicts the personal characteristics of the fraudster. The mean score for CAP is 2.926, indicating their disagreement with the items measuring the respondents' capability to exploit the system to make fraud. The respondents also slightly disagree that the organisation is easily manipulated to avoid the detection of irregularities in the procurement process. Table 4 also presents a descriptive analysis of the study's third variable, opportunity (OPP). The mean score of items measuring OPP is 2.97, indicating the respondents tend to disagree with the statement representing the poor and inefficient accounting and information systems at RMAF.

4.3 Reliability Analysis

Cronbach's Alpha coefficient is a frequently used metric of internal consistency. Alpha is quantified similarly to Pearson r (correlation coefficient) and ranges typically between 0 and 1. The closer the Alpha value is to 1.00, the more consistent the components in the instrument tested are internal. The ideal value of Cronbach's Alpha coefficient differs among various studies. According to Donghui, Sungbae & Taesoo (2015), a widely accepted level of

adequacy for Cronbach's Alpha has been at least 0.7. Cronbach's Alpha of each latent variable exceeded the suggested cut-off value of 0.7, indicating the good reliability of all constructs (Bagozzi & Yi, 1988; Hair, Anderson, Tatham, & Black, 1998; Hayduk, 1987).

Table 5. Reliability Statistics of the variables

Variables	Cronbach's Alpha	Cronbach's Alpha Standardized Items	based on N of Items
Likelihood of Fraudulent (LF)	.845	.826	11
Work Commitment	.887	.890	9
Capability (CAP)	.662	.666	5
Opportunity (OPP)	.854	.847	21

According to Table 5, the measurement dependability score for the LF is 0.845. This suggested that 84.5% of the score's variance was reliable. Additionally, it demonstrated an 84.5% consistency in the measurement used in this study. In other words, the data were 15.5% erroneous. As a result, the replies to all LF items were considered credible for data analysis. Referring to the table above, the reliability test score for WC is 0.887. A reliability test determines how consistent a test score is. This variable was 88.7% consistent in this investigation, as indicated by the value of 0.887. Additionally, this variable had a small error variance of 11.3%, indicating that all values in this variable were dependable and could be evaluated. Based on the table above, the score of the reliability test for CAP is 0.662. The reliability test measures the consistency of a test score. The result of 0.662 showed that this variable was 66.2% consistent in this study. Furthermore, this showed a slight 33.8% error data variance, indicating that all items in this variable were reliable and could be analysed. Based on Table 5, the score of the reliability test for OPP is 0.854. It meant that 85.4% of the variances in the score were reliable variance. It also indicated 85.4% of consistency in this study's measurement. In other words, the data contained 14.6% of error variance. Therefore, the responses for all items in this variable were reliable for data analysis.

4.4 Correlation Analysis

Table 6. Correlation analysis of LF, WC, CAP, and OPP

		LF	WC	CAP	OPP
	Pearson Correlation	1	082	.620**	.555**
LF	Sig. (2-tailed)		.305	.000	.000
	Ν	157	157	157	157
	Pearson Correlation	082	1	.047	.023
WC	Sig. (2-tailed)	.305		.560	.771
	Ν	157	157	157	157
	Pearson Correlation	.620**	.047	1	.589**
CAP	Sig. (2-tailed)	.000	.560		.000
	Ν	157	157	157	157
	Pearson Correlation	.555**	.023	.589**	1
OPP	Sig. (2-tailed)	.000	.771	.000	
	Ν	157	157	157	157
**. Co	rrelation is significant at the 0.01 level ((2-tailed).			

Correlation is primarily concerned with determining the existence of a link and the degree and direction of that relationship. It is a technique for determining the degree to which two variables are connected and the response pattern across variables. The correlation coefficient of LF and WC was not significant suggesting no association between these variables. The result of Pearson correlation, p-value < 0.01, for the LF and CAP was significant with a

correlation coefficient r=0.620. This indicated a high positive correlation between LF and CAP. The result of Pearson correlation, P-value < 0.01, for LF and OPP was significant with a correlation coefficient r=0.555. This indicated a positive correlation between OPP and LF. The results suggested likelihood of fraudulent cases increases when there is opportunity and capability existed.

4.5 Correlation Analysis

Table 7. Multiple Regression and ANOVA Model

Model S	Summary						
Model	R	R Square	Adjusted Square		^R Std. The error of the Estimate		
1	.672 ^a	.452	.441		.53333		
a. Predi	ctors: (Consta	nt), OPP, WC	C, CAP				
ANOVA	A						
Model		Sum of S	quares	df	Mean Square	F	Sig.
	Regression	35.860		3	11.953	42.025	.000 ^b
1	Residual	43.519		153	.284		
	Total	79.379		156			
a. Depe	ndent Variable	e: LF					
b. Predi	ctors: (Consta	nnt), OPP, WC	C, CAP				

Multiple regression approaches were utilised to evaluate the study's hypotheses and determine the relative effects of the research variables, which were WC, CAP, and OPP, on the LF. According to the chart, approximately 45.2% of variations in the LF in the RMAF e-procurement system might be accounted for by WC, CAP, and OPP variances. Furthermore, the results showed a significant linear relationship between WC, CAP, and OPP towards the LF in the RMAF e-procurement system, with F (3,153) being 42.025 and p being 0.000 based on the ANOVA table.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		β	Std. Error	β		-
	(Constant)	.448	.347		1.289	.199
1	WC	119	.065	110	-1.842	.067
1	CAP	.452	.074	.454	6.125	.000
	OPP	.400	.102	.291	3.924	.000
a. Depe	ndent Variable	e: LF				

Table 8. Multiple Regression Coefficients

The p-value shows the incline of the regression line and the strength of the relationship between the independent and dependent variables. Based on the analysis, the regression output described insignificant relationships between WC and LF as the p-value of 0.067 was higher than 0.05. Thus, hypothesis H1 was not supported. Based on Table 8, CAP had a positive and statistically significant relationship with the LF ($\beta = .454$, t = 6.125), whereas the p-value of 0.000 was less than 0.05. Thus, hypothesis H2 was supported. Besides that, OPP also had a positive and statistically significant relationship with the p-value of 0.000 was less than 0.05. Thus, hypothesis H3 was supported. The multiple linear regression above suggested that only H2 and H3 were supported. This indicates that capability and opportunity will influence the likelihood of fraudulent cases on e-procurement in RMAF.

5. Discussion and Conclusion

This study aimed to examine the influence of work commitment, capability, and opportunity on likelihood of fraud in the e-procurement system adopted by RMAF. The findings of this study demonstrated a significant correlation among CAP, OPP, with LF. Furthermore, CAP and OPP were indicated as predictive factors that influence fraud in e-procurement systems in the RMAF and altogether explained 45.2% of the variances in the data.

The present study proposed that the work commitment will have negative influence on the likelihood of fraudulent

cases in RMAF. Based on the analysis, this hypothesis was not supported. When WC was examined, according to Mowday, Steers, and Porter (1979), employees who committed to an organisation kept their loyalty. Employees with a high level of job commitment will maintain their good reputation in a company and care deeply about organisations. Employees desire to give their best effort and maintain the company in good shape. Therefore, employees will engage in fraud to improve the organization's reputation. Wicksono (2016) found a correlation between work dedication and intent to commit fraud. High levels of dedication among employees are associated with fraud, while commitment does not affect fraud purpose. The present study proposes that the WC will negatively influence LF as personnel in the RMAF with high work commitment will not commit fraud. This situation is also expected as military personnel is trained to be loyal to the organisation. Even though they have a high work commitment, they will avoid fraud in the organisations.

CAP had a significant positive relationship with LF. This is consistent with the results addressed in Komakech (2016); achieving the best procurement practice depends widely on the leadership and competence of the procurement stakeholders in the organisation. In addition, the results of previous studies (Saujana et al., 2019) showed that capability positively affected fraud behaviour. Consistent with the study conducted by Wolfe and Hermanson (2004), position, intelligence, ego, coercion, deceit, and stress are the factors that enable the capability. This is the situation of having the necessary traits or skills and abilities for the person to commit fraud. As a result, this study showed that most respondents agreed that fraud would occur when the person involved directly in the procurement process could commit fraud.

OPP was examined and found to have a relationship with LF. Most respondents believed that opportunity was the main factor for personnel to commit fraud in the procurement process. Previous studies (Saujana et al., 2019) showed that opportunities and rationalization positively affected fraud behaviour. As a result, this study found that opportunities positively correlated with the likelihood of fraud in the RMAF. Most respondents agreed that a person involved directly in the procurement process could commit fraud when they had an opportunity to do so. The factors, such as lack of internal control, inadequate record keeping, and lack of monitoring by high level, could be the cause of opportunities for committing fraud. Opportunity is created by ineffective control or governance system that allows an individual to commit organisational fraud. In the field of accounting, this is termed an internal control weakness. The concept of perceived opportunity suggests that people will take advantage of the circumstances available (Kelly and Hartley, 2010).

According to the findings, the RMAF has significantly benefited from using an e-procurement system. It is yet another approach for the government to reduce management expenses while simultaneously improving the effectiveness of its online purchasing procedures. The other researchers (Thai, 2001) addressed that implementing e-procurement will result in quality bidding, adequate timeliness, cost savings, reduced business effort, reduced financial risks and technical risks, and finally, increased supplier competition, all of which will result in avoiding the costs associated with purchasing goods or services at high prices. In order to reduce the danger of procurement fraud in RMAF, e-procurement can be implemented. Top management of RMAF must enforce and closely monitor the personnel involved directly with the e-procurement process. Based on the findings, OPP and CAP had a relationship with the LF in the RMAF. In other words, personnel involved in the e-procurement process might have the capability and opportunity to commit fraud. As a result, RMAF's top management has to strengthen the policies and legislation from time to time. After developing sound policies and legislation, RMAF's top management has to develop a method of monitoring the personnel. The internal audit or internal control procedure is a good tool for monitoring the person involved in the procurement fraud can be deterred by applying relevant internal controls to the procurement processes. To conclude, RMAF management should supervise the personnel closely.

This study encounters a few limitations. Firstly, the sample was limited to agents who worked and served in the RMAF. This study used only RMAF personnel as the respondent. The sample size only covered Military Personnel serving in RMAF – Airforce Headquarters and Air Force Base. Not all staff and contractors were involved directly in the procurement system. Therefore, a more significant model or replication of this research could be achieved on contractors and civilian staff. It will explore the critical interaction between structures and understand more about fraud in the e-procurement system. These results can be generalised better with other respondents with different backgrounds. Second, limited previous studies or research conducted on procurement fraud that occurred in military organisations limit the comparison and discussion of the present study. Past studies related to e-procurement were conducted in other ministries and the private sector, such as banking institutions (Awang & Ismail, 2018), the Ministry of Home Affairs (Ismail et al., 2018), telecommunications (Ahmad et al., 2017) and government ministries (Aman, & Kasimin, 2011). Finally, this research only included several factors contributing to the likelihood of fraud. Other factors, such as morality leadership, work environment, religious faith, and organisational culture, might be

considered to study in the same field.

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References

- Abu B. N., Peszynski, K., Azizan, N., Pandiyan, V., & Sundram, K. (2016). Abridgment of Traditional Procurement and E-Procurement: Definitions, Tools, and Benefits. *Journal of Emerging Economies and Islamic Research*, 4(1), 74-91. https://doi.org/10.24191/jeeir.v4i1.9080
- Abdul Latif, N. W., Hasnan, S., Hussain, A. R., & Ali, M. M. (2021). The Influence of Fraud Prevention Mechanism on Fraud Awareness in the Federal Ministries in Malaysia. *Asia-Pacific Management Accounting Journal*, 16(3), 191-220. https://doi.org/10.24191/APMAJ.v16i3-08
- Aryati, A.S., Sudiro, A., Hadiwidjaja, D., & Noermijati. (2018). The Influence of Ethical Leadership to Deviant Workplace Behavior Mediated by Ethical Climate and Organisational Commitment. *International Journal of Law and Management*. https://doi.org/10.1108/IJLMA-03-2017-0053
- Azmi, K., & Rahman, A. (2015). E-Procurement: A Tool to Mitigate Public Procurement Fraud in Malaysia? *The Electronic Journal of e-Government, 13*(2), 150-160.
- Baz, R., Samsudin, R. S., Che-Ahmad, A., & Popoola, O. M. (2016). Capability Component of Fraud and Fraud Prevention in the Saudi Arabian Banking Sector. *International Journal of Economics and Financial Issues*, 6(4), 68-71.
- Eaton, T. V., & Korach, S. (2016). A Criminological Profile of White-Collar Crime. *Journal of Applied Business Research*, 32(1), 129-142. https://doi.org/10.19030/jabr.v32i1.9528
- Esa, M. M., Abdul Rahman, N.A., & Abdul Munir, Z. (2013). ePerolehan: The Implementation and Future Trends of eGovernment Incentives. *IEEE Business Engineering and Industrial Application Colloqium*, 17-21. https://doi.org/10.1109/BEIAC.2013.6560107
- Haron, N., Abdul Rahman, R., Othman, R R., Shu Hui, W., & Hj Omar, N. (2011). Procurement Issues in Malaysia. *International Journal of Public Sector Management*, 24(6), 567-593. https://doi.org/10.1108/09513551111163666
- Hasnan, S., & Hussain, A. R. M. (2015). Factors Associated with Financial Restatement: Evidence from Malaysia. *Jurnal Pengurusan*, 44, 105-116. https://doi.org/10.17576/pengurusan-2015-44-10
- Husin, N. H., Lada, S., Hamzah, A. A., & Vun, T. K. (2019). An Empirical Investigation of E-Procurement Adoption in Malaysia: The Case of SMEs in Sabah. *Labuan Bulletin of International Business & Finance*, 17(1), 102-108. https://doi.org/10.51200/lbibf.v17i1.1914
- Islam, M. M., & Alharthi, M. (2020). Relationship Among Ethical Commitment, Ethical Climate, Sustainable Procurement Practices, and SME Performance: An PLS-SEM Analysis. Sustainability, 12, 1-25. https://doi.org/10.3390/su122310168
- Johanson, G.A., & Brooks, G.P. (2010). Initial Scale Development: Sample Size for Pilot Studies. *Educational and Psychological Measurement*, 70(3), 394-400. https://doi.org/10.1177/0013164409355692
- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610. https://doi.org/10.1177/001316447003000308
- KPMG. (2013). KPMG Malaysia Fraud, Bribery and Corruption Survey 2013, Malaysia. KPMG publisher. From
https://www.kpmg.com/MY/en/IssuesAndInsights/ArticlesPublications/Documents/2
013/fraud-survey-report.pdf
- MACC. (2018). Annual Report 2018. Available at: http://online.fliphtml5. com/wkyry/vjeo/#p=1
- Magdalena, R., & Dananjaya, Y. (2021). CEO Capability and CEO Arrogance: Their Relationship with Fraudulent Financial Statement Indication. *International Journal of Scientific Research and Management*, 9(7), 2319-2328. https://doi.org/10.18535/ijsrm/v9i07.em06
- Mowday, RT, Steers, RM, & Porter, LW. (1979). The Measurement of Organisational Commitment. *Journal of Vocational Behavior*, 14, 224-247. https://doi.org/10.1016/0001-8791(79)90072-1

- Nawi, M. N., Roslan, S., Salleh, N. A., Zulhumandi, F., & Hairun, A. N. (2016). The Benefits and Challenges of E-Procurement Implementation: A Case Study of Malaysian Company. *International Journal of Economics and Financial Issues*, 6(S7), 329-332.
- Ngatman, N.H., Alderei, H.S.S., & Musa, H. (2020). The Challenges Faced by Public Sector Governance in Implementing E-Procurement System: A Case Study of The Department of Education, Malacca. *International Journal of Human and Technology Interaction*, 4(1), 39-43.
- Neupane, A., Soar, J., & Vaidya, K. (2012). The Potential of E-Procurement Technology for Reducing Corruption. International Journal of Information Technology & Management, 11, 273-287. https://doi.org/10.1504/IJITM.2012.049997
- Oliveira, L. M. S., & Amorim, P. P. (2001). Public E-Procurement. International Financial Law Review, 20(3), 43-47.
- Omar, N.B., & Mohamad Din, H.F. (2010). Fraud Diamond Risk Indicator: An Assessment of Its Importance and Usage. 2010 International Conference on Science and Social Research (CSSR 2010), 607-612. https://doi.org/10.1109/CSSR.2010.5773853
- Pressey, A. D., Vanharanta, M., & Gilchrist, A. J. P. (2014). Towards a Typology of Collusive Industrial Networks: Dark and Shadow Networks. *Industrial Marketing Management*, 43, 1435-1450. https://doi.org/10.1016/j.indmarman.2014.08.001
- Price Waterhouse Coopers. (2015). Fighting Fraud in the Public Sector VI. *Eighth PWC Global Economic Crime Survey 2016*, (February), 1-28. Retrieved from https://www.pwc.com/gx/en/psrc/pdf/pwc-fighting-fraud.pdf
- Rizki, A. A. (2018). The Challenges of E-Procurement Implementation in Infrastructure Projects. *Journal of Public Administration Studies*, 3(1), 17-25. https://doi.org/10.21776/ub.jpas.2018.003.3
- Rustiarini, N.W., T., S., Nurkholis, N., & Andayani, W. (2019). Why people commit public procurement fraud? The fraud diamond view. *Journal of Public Procurement, 19*(4), 345-362. https://doi.org/10.1108/JOPP-02-2019-0012
- Robinson, S. L., & Bennet, R. J. (1995). A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. Academy of Management Journal, 38(2), 555-572. https://doi.org/10.2307/256693
- Rustiarini, N. W., & Nurkholis. (2019). Why People Commit Public Procurement Fraud? *The Fraud Diamond View, Journal of Public Procurement, 19*(4), 345-362. https://doi.org/10.1108/JOPP-02-2019-0012
- Said, J., Asri, S., Rafidi, M., Obaid, R. R., & Alam, M. M. (2018). Integrating Religiosity into Fraud Triangle Theory: Empirical Findings from Malaysian Enforcement Officer. *Global Journal al Thaqafah, Special Issue*, 131-143. https://doi.org/10.7187/GJATSI2018-09
- Sujana, E., Yasa, I. N. P., & Wahyuni, M. A. (2019, January). Testing of fraud diamond theory based on local wisdom on fraud behavior. *In International Conference on Tourism, Economics, Accounting, Management, and Social Science (TEAMS 2018),* (pp. 12-15). Atlantis Press. https://doi.org/10.2991/teams-18.2019.3
- Suliantoro, H., & Ririh, K. R. (2019). Enhancing Usage Behavior of E-Procurement Through Organisational Values. *Jurnal Ilmiah Teknik Industri*, 18(1), 8-16. https://doi.org/10.23917/jiti.v18i1.7116
- Wicaksono, & Urumsah. (2016). Factors Influencing Employees to Commit Fraud in Workplace Empirical Study In Indonesian Hospitals. *Asia Pacific Fraud Journal*, 1(1), 1-18. https://doi.org/10.21532/apfj.001.16.01.01.01
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. CPA Journal, 74(12), 38-42.
- Zahra, F., Abdullah. M.I., Kahar, A., Din, M., & Nurfalah, N. (2021). Preventing Procurement Fraud in E-Purchasing for Indonesian Local Government. *The Journal of Asian Finance, Economics and Business*, 8(2), 505-511. https://doi.org/10.13106/jafeb.2021.vol8.no2.0505

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