

## The Implementation of Fraud Risk Assessment and Anti-Fraud Strategy in Government Institution XYZ

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### ABSTRACT

Government Institution XYZ is one of the government institutions trying to build bureaucratic reform and minimize fraud risk. This study attempted to conduct a fraud risk assessment to identify, analyze, evaluate, and determine appropriate anti-fraud strategies to various fraud risk scenarios that may occur in Government Institution XYZ. The research was conducted qualitatively with a case study approach. The data were collected through document analysis, questionnaires, interviews, and Focused Group Discussion (FGD). Based on the FRA results, researchers identified thirteen fraud risk scenarios that organization needs to anticipate. Considering the organization's risk appetite, there are two very high-level risk scenarios, four high-level risk scenarios, four medium-level risk scenarios, and three low-level risk scenarios among all of these risk scenarios. Several anti-fraud strategies need to be implemented to reduce fraud risk, including preventive, detective, and responsive strategies by optimizing existing and other relevant anti-fraud strategies.

Keyword: Public Sector, Fraud Risk, Fraud Risk Assessment, Anti-Fraud Strategy

### 1. INTRODUCTION

Fraud is the leading risk that needs to be managed in the public sector (Asare, 2009). Therefore, management in the public sector is responsible for implementing systems and processes to prevent and detect fraud. Fraud significantly affects public trust in government institutions and impacts reputation (Uslaner, 2002; US GAO, 2015). According to IIA (2006), internal auditors in the public sector have a crucial role in detecting and preventing fraud, inappropriate actions or abuse, and abuse of power and resources entrusted to government officials.

As part of efforts to prevent corruption, the Government of Indonesia strives to build a bureaucratic system free from corrupt practices through bureaucratic reform. This matter is a part of the

Government's Long-Term Plan for 2005-2025, which uses bureaucratic reform as a strategy to increase the nation's competitiveness. Bureaucratic reform is based on increasing the professionalism of the state apparatus to support good governance.

In line with the bureaucratic reform program, Government Institution XYZ has attempted to implement various programs to reduce fraud risks in the organization. In the 2019 Annual Report, Government Institution XYZ stated that during 2015-2018, the organization had imposed 168 disciplinary penalties on employees who violated the disciplinary provisions of the State Civil Apparatus.

The fraud case at Government Institution XYZ is stimulating to study. Based on the organization's 2020-2025

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Strategic Plan, Government Institution XYZ strives to reduce fraud cases and is committed to bureaucratic reform at all levels of the organization. The organization is also applying the Three Lines Model concept to build an effective internal control system. On the other hand, Government Institution XYZ has a strategic authority that other institutions do not own. Several business processes at Government Institution XYZ involve various parties with particular interests, so inherent fraud risk arises.

One way to anticipate and minimize fraud in line with the COSO Fraud Risk Management Guide (2016) is by conducting Fraud Risk Assessment (FRA). FRA assists organizations in prioritizing significant fraud risks (Bell, 2010). Through FRA, the organization will recognize the fraud risk that may occur, the effectiveness of internal controls designed and implemented to prevent and detect fraud risk and formulate the organization's most relevant anti-fraud strategy (IIA, AICPA, & ACFE, 2008). In line with that statement, Government Institution XYZ has included FRA as one of the activities organization must perform in organizational risk management. However, it has not yet included concrete and detailed steps that must be taken.

This research attempted to apply FRA to the business process at Government Institution XYZ. Assessment needs to be performed to identify fraud schemes and scenarios, assess the possibilities and impacts, evaluate the effectiveness of internal controls, assess the residual risk level, and formulate an anti-fraud strategy to reduce residual risk. The research was conducted using a qualitative method with a case study approach to producing in-depth information. The research process included various Government Institution XYZ parties with experience dealing with fraud cases, management directly related to the primary business process, and other parties who play a vital role in implementing the organization's anti-fraud strategy. These study results are expected to be input for Government

Institution XYZ to achieve more effective fraud risk management.

## 2. LITERATURE REVIEW AND HYPOTHESIS

### Fraud

According to IIA (2016), fraud is an illegal act characterized by deception, concealment, or denial of trust (violation). The IIA, AICPA, and ACFE (2008) defined fraud as any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and the perpetrator achieving again. In a broad sense, fraud encompasses all crime types that seek to profit **through** deception as the primary modus operandi (Wells, 2017). ACFE (2016) developed a fraud tree that classifies fraud into three major schemes: corruption, asset misappropriation, and financial statement fraud. Cressey (1953) identified three sources of fraud, i.e., pressure, opportunity, and rationalization.

### Fraud Risk Assessment (FRA)

FRA is a means to assist management in identifying and assessing the organization's fraud risk. FRA focuses on identifying fraud schemes and assessing the effectiveness of internal controls in preventing or detecting them early (IIA, AICPA, & ACFE, 2008). The scope of an FRA can be immense depending on the company's size, complexity, and industry. FRA can be completed within the organization's capacity, business processes, or specific transactions (Vona, 2008). The FRA considers various modes of fraud and misconduct, and management override vulnerabilities and potential schemes that can thwart control activities and necessitate additional mitigation. In implementing FRA, organizations need to consider possible fraud scenarios and financial and non-financial consequences (Grove & Clouse, 2020).

The FRA must consider fraud schemes that can occur in guiding an effective anti-fraud program (Singleton & Singleton, 2010). According to COSO (2016), applying a specific and focused FRA distinctly

from the fraud risk management process provides more significant confidence that the assessment focuses on intentional fraud.

### **Anti-Fraud Strategy**

Prevention, detection, response, and deterrence are the four main components of an effective anti-fraud strategy (IIA, AICPA, & ACFE, 2008; Singleton & Singleton, 2010; CIMA, 2012; Albrecht, 2012; US GAO, 2015). The existence of prevention, detection and appropriate response to fraud will result in effective deterrents. According to Rational Choice Theory, by increasing the possibility of detecting fraud, the organization will prevent fraud because it triggers doubt and fear effect to the potential fraudster (Becker, 1974).

### **The IIA's Three Lines Model**

The Three Lines Model is an update of the Three Lines of Defense (IIA, 2020). This model helps organizations identify the best structures and processes to help achieve objectives and facilitate strong governance and risk management. As in the Three Lines of Defense model, the Three Lines Model concept encourages management as the first line to be responsible for achieving organizational goals. The first line plays a direct role in the risk management and control processes in line with the organization's primary business activities and supporting activities. The second line plays a role in providing support related to organizational risk management and compliance. Internal audit acts as a third line providing independent and objective assurance and consulting services regarding the adequacy and effectiveness of governance, internal control, and risk management.

### **Previous Research and Research Novelty**

Research on FRA has frequently been conducted in the private sector but rarely done in the public sector. The public sector is a sector that is highly vulnerable to corruption issues (Asare, 2009). Rehman & Hakim (2020), investigated

the FRA's role in implementing Good Corporate Governance (GCG) in public companies in Oman. The results showed that the implementation of FRA assisted the company's GCG achievement. Rubasundram (2015), studied the role of management support on FRA quality. The results indicated that management support significantly influenced the FRA quality. Based on research by Wang (2015), Noviyanti & Winata (2015), and Julian et al. (2021), the FRA quality is primarily determined by the support of high-ranking officials in the company to management support. According to the findings of Nassir, Sanusi, & Ghani (2015), the FRA quality conducted by the auditor is influenced by the brainstorming process and the auditor's expertise.

Organizations must implement an effective internal control system to reduce the fraud risk (IIA, 2016). Barra's research (2010), results confirmed that improving internal control can reduce the impact of fraud risk. It is consistent with the research results of Siregar & Tenoyo (2015), who revealed that poor internal control and lack of ethical values impact the emergence of fraud. The results of Eryanto's research (2020), show at least three significant factors that make anti-fraud programs ineffective in Indonesia, namely culture, politics, and lack of ethical leadership. The results of Ali's research (2019) show that effective management of civil servants is the main pillar to realize good governance

Furqan & Tobing (2017), conducted specific research on the FRA implementation to a business process, in which they implemented FRA to a company's procurement business process. The study succeeded in identifying seventeen fraud risk scenarios that companies need to anticipate. In the public sector, Kamal & Tohom (2019), researched the fraud possibility level in goods and services procurement and successfully identified 66 fraud risks that government institutions should anticipate. Alfatah & Tobing (2019), conducted an FRA at the Directorate General of Taxes (DGT) and succeeded

in identifying 25 tax audit and collection fraud scenarios.

Previous research on FRA was primarily conducted in the private sector. Additionally, the business processes as the object of the FRA were those related to the procurement or purchase of goods/services. In contrast to previous research, this study was conducted at Government Institution XYZ, a public sector organization with a specific function. The business process in Government Institution XYZ differs significantly from that of the private sector because it must be conducted in several bureaucratic processes. Considering that the object of this research had never implemented FRA, this research included the relevant FRA design for the object of study and its application to effective business processes for the organization.

### 3. METHODS

This research employed a qualitative research method. Qualitative research provides information about a particular subject and context, explains the occurrence of a cause and effect and relationship, assesses the effectiveness, and aids the development of specific theories or strategies (Wahyuni, 2019). The approach used in this research was a case study. Case study research requires a systematic and organized mechanism for collecting and processing data on a topic and focusing on certain boundaries, events, or phenomena (Stake, 2000). This study applied various instruments to meet these requirements, including document analysis, questionnaires, interviews, and Focused Group Discussion (FGD).

This research used content analysis. In content analysis, researchers must first formulate research objectives and actions that must be taken based on these objectives (Bungin, 2011). Furthermore, researchers must identify the object of research that will be the subject of analysis. The data obtained from the study are then classified to determine the extent to which the data

is related to the research objectives. The data contents are then identified, and the frequency of occurrence is analyzed to reach certain conclusions. This research scope was limited to one of the central business processes of Government Institution XYZ at the Service Office to focus the discussion on a specific problem.

## 4. RESULTS AND DISCUSSION

### Document Analysis Results

Based on the document analysis results, researchers identified several fraud schemes and scenarios that could occur in the organization's business process. According to the document analysis results, the fraud schemes that organizations should anticipate are receiving prohibited gratuities, abuse of authority, conflict of interest, extortion, asset theft, and information theft. The researchers identified thirteen fraud scenarios related to the primary business process from these fraud schemes. Furthermore, the document analysis results also revealed various forms of internal control and anti-fraud strategies that the organization had been designed and implemented. Based on the document analysis results, the researchers then explored more information through the distribution of questionnaires, interviews, and FGDs.

### Questionnaire Results

Researchers developed an online questionnaire form to support data collection and distributed it to prospective respondents in August-September 2021. From the distributed questionnaires, researchers were able to collect data from 125 respondents. Of the various fraud schemes listed in the questionnaire, the fraud risk with the most significant occurrence probability, according to respondents, was receiving gratuities. Based on the consecutive respondents, the subsequent risk scheme with a relatively high occurrence probability was the abuse of authority, conflict of interest practices, and requests for money (extortion).

### Interview Results

The interviews in this study were conducted in two stages, interview I and interview II, using a semi-structured in-depth interview technique. Interview I was utilized to validate document analysis results, explore information, and gather input for a questionnaire. Interview II was used to clarify various possible fraud scenarios and the effectiveness of internal controls, describe vulnerable areas to fraud and the fraud causes and formulate relevant anti-fraud strategies.

There were two respondents in interview I, whereas, in interview II, there were twelve respondents. Based on the interview, the researchers obtained the following results:

- a. The organization had never conducted an FRA but had identified vulnerable areas and potential fraud scenarios.
- b. The most common fraud risk scheme encountered by Government Institution XYZ employees was receiving gratuities. The following fraud scheme was frequently encountered and was related to the abuse of authority.
- c. Among all business processes at Government Institution XYZ, the informants believed that the business process in this research was the highest possible fraud risk.
- d. The dominant factors that contributed to fraud were opportunity and rationalization.
- e. The organization still needs to improve the effectiveness of anti-fraud strategies.
- f. To increase the effectiveness of the organization's internal control system, the organization needs to improve coordination and collaboration between all the control lines.

### FGD Results

The FGD was held on October 25, 2021, and was attended by parties who play an essential role in implementing the organization's anti-fraud strategy, including management, Internal Compliance

Unit, Gratuity Control Unit, anti-corruption counselors, and risk manager. The number of FGD participants was eight respondents at the Government Institution XYZ head office. The FGD process began with the researchers' explanation of the FRA, including its definition, objective, process, implementation to Government Institution XYZ, and anti-fraud strategy proposed for the organization. Further, discussions were held with the following results:

- a. Government Institution XYZ had not implemented FRA comprehensively on the organization's core business processes.
- b. The list of fraud risk schemes and scenarios presented by the researchers had reflected all the risks that could occur in the main business process. Based on organization risk management guidance, the organization has a low-risk appetite and tolerance for fraud.
- c. Various fraud risk schemes and scenarios that researchers had identified need to be evaluated periodically to align with the dynamics of the organization, the development of the internal control system, and the quality of risk management.
- d. The anti-fraud strategy proposed by the researchers was consistent with the organizational integrity framework and the bureaucratic reform program, especially in strengthening supervision areas.
- e. For several new anti-fraud strategies proposed by researchers, including conflict of interest regulation, know your customer program, combined assurance, and publication of disciplinary penalties related to fraud cases, FGD participants thought that it was relevant to do so. However, its implementation needs to be supported by well-developed tools and policies. Therefore, it is effective in mitigating the fraud risk.

## DISCUSSION

### FRA Implementation

Government Institution XYZ did not have specific guidelines for fraud risk management and FRA implementation. In developing the FRA design, this study adapted the FRA guidelines published by ACFE (2020) and considered general risk management guidelines applicable to the organization (2019). According to the IIA, AICPA, & ACFE (2008), the FRA process includes several stages starting by forming an FRA team, identifying the inherent fraud risk, assessing the possibility and impact of the occurrence of a default fraud risk scenario, assessing the level of inherent fraud risk, examining the effectiveness of internal controls, assessing the level of residual fraud risk, and determining the appropriate responses.

#### a. Forming the FRA Team

According to the IIA, AICPA, and ACFE (2008), the FRA process must be completed by a team comprised of various elements and levels of management. It is due to the possibility of the fraud risk occurring at multiple levels and business processes. In conducting the FRA, the researchers involved different key informants. The general criterion used by researchers in determining key informants was at least three years of work experience at Government Institution XYZ. Meanwhile, the specific criteria used were having experience handling fraud cases in the organization or at least understanding business processes, SOPs, internal controls, organizational risk management, and parties directly involved in anti-fraud strategies developed by the organization. All informants had represented management, second-line, and third-line elements in the organization's internal control system.

#### b. Identifying Inherent Fraud Risk Schemes and Scenarios

Government Institution XYZ needs to anticipate several inherent fraud risks in the organization's leading business process. Based on the identification of

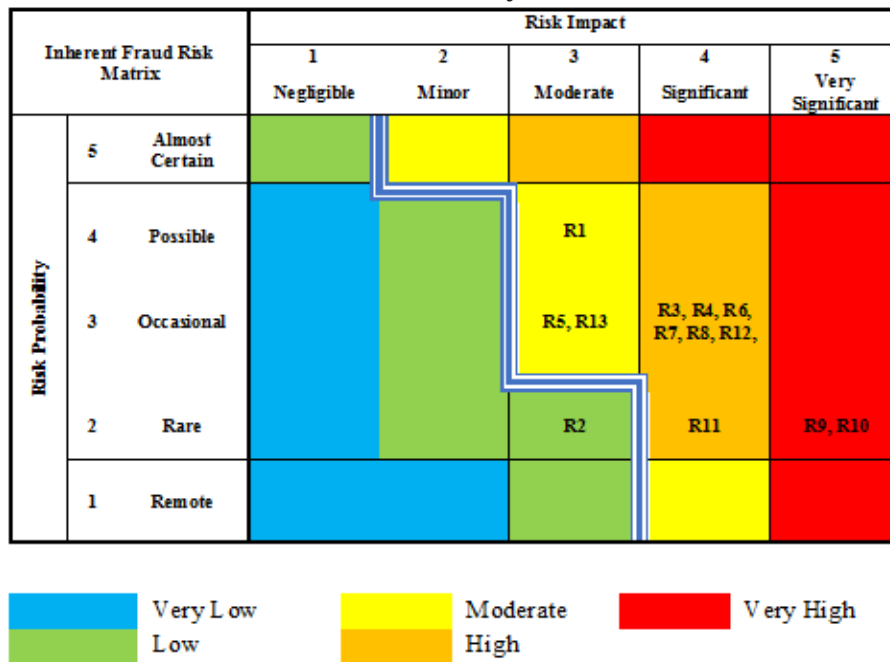
inherent fraud risk, in total, there are thirteen fraud risk scenarios related to the organization's primary business process. The dominance of the fraud risk scheme is abuse of authority, receiving gratuities/bribes, extortion, and conflicts of interest. The parties involved in the fraud scenario are primarily employees who are directly involved in the business process.

c. Determining Risk Assessment Criteria  
Risk assessment was performed by considering the possibility of risk occurrence and the resulting impact. Several guidelines regarding FRA did not contain exact provisions on setting criteria for the possibility of fraud risk. However, the determination of these criteria can be done either qualitatively or quantitatively. In developing criteria for the opportunity and impact of risk occurrence, the researchers adapted the consideration factors mentioned by ACFE (2020), and adjusted them to the organization's risk appetite. In this research, there are several criteria to assess the possibility of risk: (1) Previous fraud incidents; (2) The number of public complaints related to the risk scenario; (3) The element of subjectivity in the stages of the business process related to the fraud scenario; (4) The number of parties that may be involved in the fraud scenario; (5) The complexity of the fraud risk scenario; (6) Resources needed to uncover fraud scenarios; and (7) The results of the fraud survey. Meanwhile, to measure the impact, this study uses the criteria of financial loss, reputation, and the sanctions imposed.

#### d. Measurement of Inherent Fraud Risk Possibility, Impact, and Vulnerability

Based on the criteria for the probability and impact of the risk occurrence determined, the probability and impact of each fraud risk scenario were assessed. Next, the researchers mapped the level of vulnerability to inherent fraud risk in each risk scenario. The results of assessing the level of vulnerability to inherent fraud risk are presented in Figure 1.

Figure 1. Inherent Fraud Risk Vulnerability Level



Source: Data Processed

Based on Figure 1, twelve identified fraud scenarios have an inherent fraud risk level that is higher than the organization’s risk appetite. Government Institution XYZ has designed and implemented internal controls to reduce the risk level to the desired level based on these conditions. The following descriptions discuss the effectiveness of internal control.

e. Evaluation of Internal Control Effectiveness

Internal control effectiveness was evaluated to determine two issues: (1) whether each fraud scenario has an adequate internal control design; and (2) whether the internal control has been implemented as designed. In assessing the effectiveness of the internal controls, the researchers analyzed the code of ethics and organizational discipline regulations, reports on audit results, reports on the results of Internal Compliance Unit monitoring, and explored more information through questionnaires and in-depth interviews. The results of the evaluation of the effectiveness of internal control yielded three conclusion types: (1) ineffective, (2) less effective, and (3)

effective. Internal control is classified as ineffective if no internal control design or internal control design exists but has never been implemented. Internal control is less effective if internal control design exists but has not been able to prevent and detect fraud risk promptly or prevent and detect fraud risk but is not implemented consistently by the organization. Last, internal control is effective if the design and implementation of internal control have been able to promptly prevent and detect fraud risk.

f. Assessment of Residual Fraud Risk and Determination of Appropriate Response

The residual fraud risk level was assessed by highlighting the inherent fraud risk level and the internal control effectiveness. The process of assessing the residual fraud risk level was done by adapting the risk management guidelines applied by the organization. According to these guidelines, residual fraud risk is classified by the level and magnitude of the risk in a risk map. The results of the residual fraud risk assessment are presented in Figure 2.

Figure 2. Residual Fraud Risk Vulnerability Level

Residual Fraud Risk Matrix			Risk Impact				
			1	2	3	4	5
			Negligible	Minor	Moderate	Significant	Very Significant
Risk Probability	5	Almost Certain					
	4	Possible					
	3	Occasional			R1'		
	2	Rare			R5', R13'	R6', R7', R8', R12'	
	1	Remote			R2'	R3', R4', R11'	R9', R10'

Source: Data Processed

In line with the organization’s risk management guidelines, the organization’s risk appetite was at very low and low levels. Based on the fraud risk map above, ten risk scenarios were still above the organization’s risk appetite, while three were within the risk appetite range. Furthermore, risk scenarios that exceeded the organization’s risk appetite must be responded to with additional mitigation in an anti-fraud strategy.

**Fraud-Cause Analysis**

Fraud-cause analysis was conducted by referring to the Fraud Triangle theory. The dominant factors of opportunity and rationalization were identified in the receiving gratification case. The opportunity factor could be seen from the possibility of direct interaction between Government Institution XYZ employees and service users outside the office without adequate supervision. The opportunity factor was deemed dominant in several fraud types in the form of abuse of authority and conflicts of interest. The opportunity factor emerged as a result of gaps in the internal control system, lack of supervision from superiors, limited scope of monitoring Internal Compliance Unit, and limited intensity of audits conducted by the Inspectorate General. The rationalization factor could be perceived from the assumption that

gratification might be received because it was a voluntary gift and does not affect the quality of services provided.

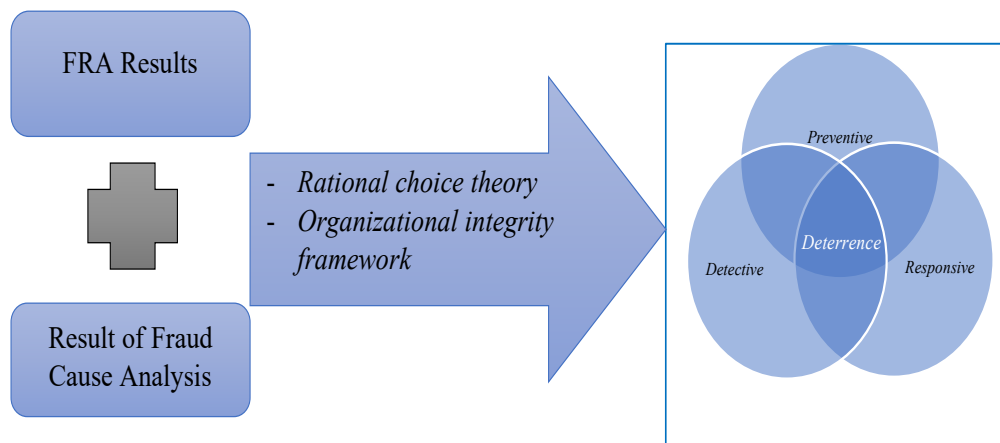
**Anti-Fraud Strategy Design**

Based on the FRA results, the organization already had a fraud risk map that needed prioritized handling. Meanwhile, based on the analysis of the causes of fraud, the factors causing fraud in the Fraud Triangle that dominated fraud cases were opportunity and rationalization. In formulating an anti-fraud strategy, the researchers classified anti-fraud strategies from a preventive, detective, and responsive perspective by referring to the Rational Choice Theory and the organization’s integrity framework. An overview of the anti-fraud strategy framework is presented in Figure 3.

Organizations must use the concept of Rational Choice Theory to increase the possibility of detecting all fraud scenario forms early. Through the appropriate combination of preventive, detective, and responsive, it is expected to become deterrents for potential parties to commit fraud (ACFE, 2008; CIMA, 2012; Albrecht, 2012). The formulation of this anti-fraud strategy included the most crucial issues that need to be re-emphasized, added to, or improved in quality based on the results of document analysis and interviews with various informants.



Figure 3. Anti-Fraud Strategy Design



Source: Data Processed

### Fraud Prevention Strategy

#### a. Tone at the Top

The researchers' interview results with several informants indicated that the issue that needs to be prioritized in fraud prevention efforts is tone at the top. Tone at the top plays a vital role in creating an ideal work environment, including FRA implementation. In the context of internal audit, the tone at the top could influence the professional skepticism of internal auditors. On the other hand, one of the factors contributing to the auditor's failure to achieve optimal results in detecting fraud was the lack of professional skepticism (Juliana et al., 2021; Noviyanti and Winata, 2015; Kabuye et al., 2015). According to ACFE, organizational leaders can create and maintain a proper ethical climate in an organization by completing four steps: (1) communicating the expectations of leaders to employees; (2) being an example in leading the organization (lead by example); (3) providing a secure mechanism for reporting violations; and (4) awarding of Integrity.

#### b. Fraud Awareness Program

Poor internal control and non-compliance with ethical values can threaten the organization. It encourages organizations to increase fraud awareness among employees (Siregar & Tenoyo, 2015). According to Yuniarti (2017), and Ariyanto & Bone (2020), increasing internal control

and fraud awareness positively impacts fraud prevention in the Indonesian government sector.

Based on the results of document analysis, questionnaires, and interviews, the organization has attempted to raise employee fraud awareness through various means, including socializing fraud-vulnerable areas and implementing a whistleblowing system. However, in terms of fraud-vulnerable areas, the organization has not conducted regular updates and socialization.

In addition to regular socialization regarding the fraud risks, fraud awareness also needs to be implemented through the publication of code of ethics sanctions and disciplinary penalties that the organization has imposed on fraudsters. This publication is intended to show that the organization has a solid commitment to crack down on fraud and serve as an effective deterrent for employees. As stated by Button et al. (2012), the concept of deterrence consists of two forms, including individual deterrence and general deterrence. Individual deterrence is applied through the sanction imposition to provide a deterrent effect to the fraudster. In contrast, general deterrence is achieved through the sanction publication to signal employees not to consider or engage in fraud.

c. Conflict of Interest Management

Government Institution XYZ does not have a formal arrangement regarding the types and activities classified as conflicts of interest and control. According to some informants, several practices in the service office are classified as conflicts of interest. This information is in line with the questionnaire results, which shows that as many as 12.80% of respondents think that employees of Government Institution XYZ have close relationships that exceed the limits of professional attitudes with service users. For this reason, Government Institution XYZ should have a formal guideline for managing conflicts of interest. To have binding power, the guidelines for managing conflicts of interest need to be formalized in a regulation set by the organization's highest official.

d. Enhancement of Gratuity Control Program

As part of the gratuity control program, Government Institution XYZ has "Unit Pengendalian Gratifikasi (UPG)" or Gratuity Control Unit up to the Service Office level. The questionnaire results showed that 7.20% of employees considered that the role of UPG was not or less effective. The results of interviews with UPG managers showed that UPG officers in service offices often did not know how to follow up technically when receiving reports of gratuities receipts. Another thing that shows the ineffectiveness of the UPG is the small number of reports on receiving gratuities to the UPG. In dealing with these conditions, Government Institution XYZ needs to increase the gratuity control program effectiveness.

e. Know Your Customer Program

Based on document analysis and interviews with several informants, the characteristics of service user agencies were indicated to influence the occurrence of fraud cases at Government Institution XYZ. Several cases of Government Institution XYZ employees receiving gratuities and abusing their authority were linked to the service users with specific characteristics. Therefore,

Government Institution XYZ must map the characteristics of government agencies that use services.

Government Institution XYZ can formulate a more appropriate service strategy and protect employees by knowing customer characteristics. Organization can, for example, (1) strengthen the commitment of the Government Institution XYZ leadership and the heads of relevant agencies regarding efforts to improve the integrity of employees in each agency; (2) minimize the occurrence of direct contact with customers, especially on services performed outside the office; and (3) provide assistance from supervisors or second/third lines in a service that involves direct contact with the agency.

**Fraud Detection Strategy**

a. Combined Assurance

The assurance for the business process is completed by management, Internal Compliance Unit, and the Inspectorate General. Organization must improve coordination in the assurance process to create an effective combination of assessments. The organization needs to determine the area that is the object of assurance for management, the Internal Compliance Unit, and the Inspectorate General and conduct periodic evaluations of the assurance results. Management can concentrate on quality assurance and the improvement of business processes. Internal Compliance Unit monitors the effectiveness of internal controls and the possibility of red flags appearing. The Inspectorate General examines the sample work units in assessing the effectiveness of internal control and risk management and provides assurance on information technology governance. The Inspectorate General can conduct analytical data periodically.

b. Red Flag Monitoring

Government Institution XYZ must map out various conditions that can become red flags for fraud as part of the fraud detection. Furthermore, the organization

can design red flag monitoring activities and develop appropriate responses if the red flag is detected.

c. Whistleblowing System and Protection of Whistleblowers

In line with the FRA results, several frauds risk schemes and scenarios are relatively arduous to prevent and/or detect using an internal control system. It occurred in fraud schemes and scenarios that work outside the normal system, including illegal gratuity, economic extortion, fraud, and conflict of interest. Concerning this scenario, the organization cannot rely on the internal control system or the assurance process typically conducted by management, Internal Compliance Unit, or the Inspectorate General. One of the mechanisms that Government Institution XYZ can use to mitigate these risks is to optimize the Whistleblowing System.

The public complaint system managed by Government Institution XYZ also faced hindrances related to the issue of protecting whistleblowers. Based on the questionnaires distributed by the researchers, 28.80% of respondents doubted whether the employee protection system was functioning correctly. These data are also derived from the evaluation of entity-level internal control completed by Government Institution XYZ work units, which showed that employees were afraid to convey negative information through existing complaint channels.

Government Institution XYZ must integrate various complaint channels managed by the organization to optimize the role of the whistleblowing system. Intensive coordination to collect information quickly among officers in each complaint channel is also critical. Additionally, organization must also affirm their commitment to protect whistleblowers and promote methods of anonymous reporting. Socialization on submitting complaints also needs to be done to reduce the intensity of unclear, vague reports or not accompanied by adequate preliminary evidence.

### Fraud Response Strategy

A prompt response to an act of fraud can minimize the losses and serve as a deterrent for potential fraudsters. Management, the Internal Compliance Unit, and the Inspectorate General are responsible for responding to fraud. Management is responsible for following up on information about suspected fraud committed by their subordinates. The process of disclosing fraud by the direct supervisor may experience hindrances due to limited competence and information, so the Internal Compliance Unit is frequently assisted by collecting materials and information. In relatively complex cases, the Inspectorate General responds to fraud actions by investigating audits. The assistance process by Internal Compliance Unit and the Inspectorate General is not only in fraud disclosure activities. Still, it is also included in the examination process in the context of imposing disciplinary penalties. In line with efforts to raise fraud awareness, the disciplinary penalties that the organization has imposed on fraudsters need to be published to employees to demonstrate the organization's commitment to discipline enforcement.

### Relationship Pattern According to the Three-Lines Model

The Three Lines Model specifies the existence of a coordinating and collaborative relationship between each line. In the context of Government Institution XYZ, the results of interviews with many informants indicated a condition of the relationship between lines that was not running optimally. Each line had an assurance function within the assurance framework, but combined assurance had not yet been implemented. It caused redundant assessment practices among the three.

Government Institution XYZ and the Inspectorate General need to intensify and improve inter-line relations based on these conditions. Given that the organization's internal control and risk management systems were still not performing

optimally, the Inspectorate General, as the third line, needs to provide more consulting services through intensive socialization of internal control and risk management to management. On the other hand, in the consultation process, the Inspectorate General also needs to improve the quality of assurance carried out by management and monitor internal control conducted by the Internal Compliance Unit. It can be accomplished through training on assurance and monitoring techniques and ensuring that management and the Internal Compliance Unit can design an assurance plan that is more effective and has an impact on continuous improvement.

## 5. CONCLUSION

Based on data collection and analysis conducted by researchers, the results of this study are as follows: 1) FRA is relevant to be applied to Government Institution XYZ. Through FRA, organization can obtain a comprehensive fraud risk profile because it includes information on fraud schemes and scenarios, the inherent fraud risk level, the effectiveness of internal controls designed to overcome fraud, and the residual fraud risk level encountered by the organization. Furthermore, the organization is aware of the fraud risk schemes and scenarios that need to be prioritized for handling and can develop relevant anti-fraud strategies. 2) Based on the FRA implementation to the primary business process in Government Institution XYZ, the researchers succeeded in identifying thirteen fraud risk scenarios that might occur. Based on the organization's risk appetite, ten risk scenarios must be prioritized to mitigate. 3) The dominant factors that caused fraud risk in organization based on the fraud triangle theory were opportunity and rationalization. 4) The hindrance faced by the organization in implementing the FRA was that the organization did not yet have a comprehensive guideline for the FRA process. On the other hand, the organization did not have a detailed roadmap to implement an anti-fraud strategy. Based on the FRA results, the fraud risk associated

with a corruption scheme was a risk that dominated Government Institution X. It is consistent with Asare (2009), who stated that public sector organizations are vulnerable to corruption issues. Previous research on fraud risk in the government sector, for example, Kamal & Tohom (2019) and Alfatah & Tobing (2019), also identified corruption as a risky scheme that organizations need to mitigate. The risk of corruption had an impact on the occurrence of state losses and affected public trust. Therefore, it affected the reputation of the organization. According to the analysis of the fraud causes, the factors causing fraud that dominated fraud cases at Government Institution XYZ were opportunity and rationalization. Referring to ACFE (2008), CIMA (2012), and Albrecht (2012), efforts to develop an anti-fraud strategy must include a preventive, detective, and responsive perspective so that it becomes deterrents for potential parties to commit fraud. Based on the research results, the following details of the anti-fraud strategy design must be completed by the organization: a) Fraud preventions contain: (1) tone at the top; (2) fraud awareness program; (3) conflict of interest management; (4) the enhancement of the Gratuity Control Unit; and (5) know your customer program. b) Fraud detections include: (1) assessment by management; (2) monitoring the effectiveness of internal controls and red flags by Internal Compliance Unit; (3) audit by the Inspectorate General; and (4) the increase of the whistleblowing system effectiveness and protection for whistleblowers. c) Responses to fraud comprise: (1) follow-up on public complaints; (2) investigation; (3) imposition of disciplinary punishment; and (4) publication of disciplinary penalties. d) Following the three pillars of the anti-fraud strategy, the organization also needs to improve the quality of coordination, communication, and collaboration according to the Three Lines Model concept. These study results indicated several fraud risk schemes and scenarios related to the primary business

process of Government Institution XYZ. On the other hand, Government Institution XYZ is dedicated to reforming the bureaucracy. Therefore, it is necessary to ensure that the anti-fraud strategy is implemented effectively. In the short term, organization needs to have a roadmap for implementing an anti-fraud strategy. As part of the anti-fraud strategy roadmap, organization needs comprehensive FRA implementation guidelines to ensure that FRA is applied periodically with consistent parameters. Additionally, the organization also needs to conduct periodic evaluations of the effectiveness of implementing the anti-fraud strategy. In the long term, organization needs to continuously improve the quality of their risk management and internal control systems. Organization needs to continue developing service automation through information technology to minimize direct interaction between employees and service users. For further research, the researchers suggest that the FRA process should cover not only the internal perspective of the organization but also involve external parties as service users. Furthermore, specific research also needs to evaluate the maturity of the organization's anti-fraud strategy and the effectiveness of the Internal Compliance Unit's performance in its position as the second line in the organization's internal control system. All risk schemes and scenarios identified in this study only included an internal organization perspective. This research has limitations because it can only publish non-confidential data and information. Because of the data and information confidentiality, many data and information cannot be described in detail in this study.

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