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# Integrating fraud hexagon into fraud control system: a study of Indonesia

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## ABSTRACT

The fraud control system is an assessment of the risk of irregularities which is a proactive process that aims to identify and overcome organizational vulnerabilities due to conditions carried out by internal and external parties to the organization. The purpose of this research is to determine the effectiveness of the newly formed Fraud Control System regulations with the integration of Fraud Hexagon to formulate effective fraud prevention and detection procedures. This study is based on empirical literature collected and interpreted from the Fraud Control System and Fraud Hexagon to formulate effective fraud prevention and detection procedures at BPKP and KemenPAN RB. The result is that BPKP and KemenPAN RB must start a joint assessment rather than working separately, because the two anti-fraud frameworks complement each other, so they must be assessed coherently to allow for a check and balance mechanism. BPKP and KemenPAN RB must also design a fraud prevention and detection framework at the national level so that the assessment also includes top level leadership. It is hoped that the implications of the research can help Indonesia to perfect a more holistic fraud control mechanism so that the effectiveness of the Fraud Control System is even better.



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## Introduction

Fraud is a worldwide concern. Association of Certified Fraud Examiners (ACFE, Report to the nations: 2018 global study on occupational fraud and abuse, 2018) estimated that during 2022, organizations around the globe suffer at least US\$4,7 Trillion from different types of fraud: corruption, misappropriation of assets and fraudulent misstatements. This is 30,5 % increase from 2020 (ACFE, 2020; 2022). Such financial losses are rampant due to the fact that fraud incidents are often clandestine. Behind the already extraordinary losses, presumably an even bigger cut-out for undisclosed frauds exists (Avery, 2020). Yet, annihilating fraud incidents often cost massive amount of money; an investment not every organization has the capacity of funding (Sow, Basiruddin, Mohammad, & Rasid, 2018). Hence, many endeavors are focused on managing risks and controlling fraud, most notably through implementing effective risk management and fraud control mechanism (Gup, 1995; Kuntadi, 2022).

Indonesia has experienced quite tumultuous phases combating fraud. In 1980's during the Suharto's 32 years regime, fraud mitigations were entrusted to The Corruption Eradication Task Force under Law 11/1980 on Bribery (Hamzah, 2005). However, neither the task force nor the Law were equipped with appropriate

power, adequate guidelines or explicit punishment for bribery or corruptions (Schütte, 2012). After the Suharto regime collapsed and the reform era took place in 1997, the policy changed. Public demands toward democracy and the importance of clean government administrations were spiraling into near chaos. Indonesia's fraud control mechanism then attempted to accommodate the transformation and balance fraud prevention, investigation and remediation. Since 1999, Indonesia started to develop more holistic anti-fraud arrangements (Suramin, 2021). The establishment of Law Number 28/1999 provides detailed guidelines on clean state administration, as well as anti-corruption, collusion, and nepotism measurements (Manengal, 2019). Also, the Anti-Corruption Act Number 31 /1999 aims at preventing and eradicating corruption in Indonesia by setting legal measures for those who participate in corrupt activities, such as accepting bribes and abusing power (Wijaya, 2016).

The Law Number 20/2001 and Law Number 30/2002 denominates the Corruption Eradication Commission (KPK) as the main body responsible for investigating and prosecuting corruption cases, as well as imposing various penalties and sanctions for corrupt individuals and organizations. Public officials are to declare their assets and disclose any conflict of interest, for accountability purposes (Suramin, 2021). The highlight of these regulations, is Law 46 / 2009 which establishes the initiation of first ever Indonesian High Court for Corruption (Safii, 2014). All these regulatory arrangements have catapulted KPK into receiving the Ramon Magsaysay Award in 2013 -an Asian version of Nobel Prize- for its innovative campaign and actions on anti-fraud agenda (Indonesia-Investments, 2021).

Since 2019, attitude towards anti-fraud mitigation in Indonesia has taken a new direction. The establishment of Law No 19/2019 on KPK has altered Indonesia's fraud mitigation endeavors into more preventive and lenient measures (Simbolon, 2020). Law 19/2019 rules that KPK's authority to wiretap is delimited; its prosecutorial power is returned to the Attorney General; and the election process of KPK's chairman requires approvals from the People Representative Office; an institution notorious for corruption scandals itself (Ramdani, 2020; Sirait & Subekti, 2022). Such a change has raised concerns on whether or not the current anti-fraud arrangement is adequate for mitigating corruptions in Indonesia (Fadhil, 2019; Suyatmiko, 2021).

Indonesia attempts to compensate its lacking in anti-fraud commitment with the establishment of two ministerial anti-fraud frameworks. Aiming at fraud prevention and detections, The Finance and Development Supervisory Agency (BPKP) established Guiding Principles of Fraud Control Plan. This designated fraud control mechanism integrates fraud risk assessment, community awareness and reporting system into an established standard of acceptable conduct and discipline (Iskandar & Yuniasih, 2019; Kuntadi, Puspita, & Taufik, 2022b). The BPKP's Fraud Control Plan has been adopted by many government institutions in Indonesia (The Finance and Development Supervisory Agency. 2021; (Nurdin, Tahar, & Nurbayani, 2019). Another endeavor is by The Ministry of State Apparatus Utilization and Bureaucratic Reform (KemenPAN RB) issuing the Ministerial Decree No 90/2021. This regulation, an amendment of Decree Number 52/2014, aims as improving the integrity of principles/values and behaviors (conducts) among public servants in Indonesia (Ministry of State Apparatus Utilization and Bureaucratic Reform 2021) The decree provides comprehensive guidelines on the designation, development and evaluation of Integrity Zone to achieve Free Corruption Zone within government institutions (Jazuli, 2021). The whole new set up put more emphasis on preventions and detection of fraud among public institutions in Indonesia (Nusa & Purba, 2021).

Such a change, however, seemed to be less effective (Sembiring & Rusmana, 2020). Statistics on KPK performance show a decelerating trend since 2019. Initially, corruption cases mitigated by KPK since 2004 were steadily increasing and reaching its peak in 2019. This match that of Indonesia's Corruption Perception Index, which are improving since 2004 and culminating in 2019 (Hamzah, 2005). From 2019 onwards, however, KPK seemed to slowing down, mitigating significantly less cases each year since 2019. The trend continues until 2022 (Wijaya, 2016). If this tendency persists, it is a public concern that the country might be heading to its notorious era of Suharto regime, where corruptions were most prevalent (Putriyana & Rochaeti, 2021).

This study proposes some suggestions for retaliating the situation. I scrutinize the Ministerial Decree 19/2021 by The Ministry of State Apparatus Utilization and Bureaucratic Reform as well as the Decree 1/2021 by the Directorate General Investigation of BPKP. I formulate the criteria, for what I believe is the most suitable fraud control system in Indonesia through literature reviews, assess the regulations, compare the current mechanism with the criteria, and propose some suggestions. Our study finds that the current guidelines on fraud prevention should anticipate fraud borne from institutional ego and the silo mechanism among government organizations. I suggest that Indonesia should create overarching governance to enable more coherent policies among government institutions.

### **Frameworks for assessing Fraud Control System Ministerial Anti-Fraud Frameworks in Indonesia**

The Finance and Development Supervisory Agency (BPKP) develop a system for preventing, detecting, and investigating corruptions. BPKP suggests 10 attributes of a Fraud Control Plan (FCP) in its Guiding Principles to be adopted by any implementing public institution: (1) Integrated policy; (2) Structure of Responsibilities; (3) Risk Based Assessment; (4) Employee Awareness; (5) Society awareness; (6) Whistle-blower protection; (7) Fraud Reporting System; (8) External reports; (9) Investigation standards; (10) Code of conduct. BPKP recommends that all public institutions in Indonesia conduct Fraud Risk Assessment regularly using the 10 attributes as the criteria. The internal audit set the parameters for each attribute, before conducting the evaluation to the institution. The result of this evaluation is measured into a fraud risk matrix as either Green (Good Performance); Orange (Need Improvement); and Red (Need Immediate Action). BPKP provide assistance for any public institution intended to conduct regular assessment on its FCP.

On the other hand, The Ministry of State Apparatus Utilization and Bureaucratic Reform (KemenPAN RB) proposes the establishment of integrity zone towards government agencies to ensure that the agencies provide clean and serving bureaucracy and are free from corruption. Integrity Zone is a verdict awarded to government agencies whose leaders and staff are committed to achieving Corruption Free Area (WBK) through bureaucratic reform, particularly in preventing corruption and improving the quality of public services. The regulation includes different phases, such as the establishment, the implementation, the evaluation and the accomplishment recognition of the integrity zone within an implementing entity. The evaluation is conducted by the Internal Assessment Team (TPI) whom are selected from the institutions' internal auditors. The TPI ought to fulfil its mandatory duties such as conducting the assessment; suggesting recommendation for the institution; reporting the information to the head of institutions; and conducting regular monitoring on the implementation of the Integrity Zone to all institutions with "Toward Integrity Zone" verdict.

The Decree 90/2021 proposes six accelerating factors to reform. Change management reform is including the establishment of commitment to changes, commitment of top managements and commitment to develop better work culture. Operational management reform consists of electronic based government system and digital transformation. Human resource management reform promotes individual performance, employee assessment and encouraging self-disciplines among employees. Accountability Strengthening includes organization's performance improvement, reward and punishment mechanism, and performance logical frameworks. Strong monitoring encompasses control mechanism and community reports; while improved quality of public services accommodates a culture of excellent services, evaluation of customer satisfaction, and the use of information technology for efficient services.

### **Effective Fraud Control System**

Effective Fraud control system (FCS) is an ever-improving process. FCS refers to the measures and procedures put in place to anticipate and mitigate fraudulent activities within an organization (Albrecht & Albrecht, 2004; Wells, 2014). Such procedures include regular assessments through a combination of operational audits, improved internal controls, appropriate oversight functions, focusing on prevention and deterrence measures; beside the routine detection and investigation mechanisms (Bologna, 1984; Kuntadi, 2015; Todorović, Tomaš, & Todorović, 2020). Effective FCS should be tailor made to respond to the institution's particular capacity, challenges, and goals (Mat, et al., 2013; Rustiari, et al., 2016; Viaene, et al., 2004; Amasiatu & Shah, 2018; Nisak & Kurniawan, 2013). An effective fraud control system, however, should accommodate holistic approach (Nazarova, et al., 2020; Suh, et al., 2019; Krambia-Kapardis, 2016).

Experts, however, are quite divided in regard to formulating a holistic Fraud Control System. (Albrecht & Albrecht, 2004) argue that fraud control systems should be focused on three elements: prevention, detection, and response. Prevention is achieved by identifying and mitigating fraud risks, while detection involves having mechanism for monitoring red flags of fraud. When fraud is detected, the organization responds with investigation and other appropriate actions. The authors thus recommend a holistic approach to fraud control involving adequate policies, procedures, controls, and training. Wells (2016) and Kuntadi (2019) argued that fraud control system consists of three phases: deterrence, detection, and investigation. The deterrence phase focuses on creating an organizational culture that discourages fraud. The detection phase involves implementing monitoring and surveillance systems to identify potential fraud. The investigation phase involves a thorough analysis of suspicious activity to determine whether fraud has occurred and to take appropriate action. Likewise, Singleton & Singleton (2010) propose a fraud control framework that includes five key elements: prevention, detection, response, investigation, and monitoring.

The authors claim that monitoring is an ongoing process that requires continuous attention and improvement. They recommend that organizations develop a culture of integrity and ethics, establish fraud

risk assessments, and implement internal controls. (Bologna et al., 1993) emphasizes the importance of understanding fraud risk and implementing appropriate controls. He proposes a fraud control framework that includes risk assessment, control design, implementation, testing, and monitoring. Bologna also recommends that organizations establish a fraud response plan that includes investigation procedures, disciplinary actions, and legal considerations. From these literatures, I conclude that fraud control system should be holistic and tailor made for each organization. A holistic fraud control system should at least accommodate three functions: prevention, detection, and investigation, while a tailor-made system should respond to an organization's unique situations and needs.

### Elements of fraud

Many experts attempt to prevent fraud by identifying its elements and avoid them from happening. (Cressey, 1953) suggested that fraud is most likely to occur when three elements: opportunity, pressure and rationalization, coexist simultaneously. Similarly, Albrecht, et al. (1984) claimed that fraud is unpredictable, hence, introduced fraud scale where he proposed that the likelihood of fraud incidents to be measured through the traction of three elements; pressure, opportunity, and integrity. (Wolfe & Hermanson, 2004) argued that fraud is often committed by knowledgeable individual, hence the fourth element: Capability. Furthermore, Kranacher & Riley Jr (2007) proposed M.I.C.E (Money, Ideology, Coercion, Ego) as elements motivating a person to commit fraud. Kaseem and Higson (2012) excerpted these theories into four elements: motivation, opportunity, integrity, and capability. Vousinas (2019) added psychological aspect into the proposed theory; hence, Ego; as the fifth elements beside Stimuli, Capability, Opportunity, and Rationalization (SCORE). Later on, Vousinas added Collusion and proposes Fraud Hexagon where he identifies six key elements that creates an environment in which fraud can occur. These six elements are the Fraud Hexagon (SCCORE), namely; Stimulus/pressure, Capability, Collusion, Opportunity, Rationalization, and Ego/Arrogance (Vousinas, 2019; Kuntadi, 2022c).

I use Vousinas (2019) in assessing the integrity zone since he provides the most holistic frameworks for analyzing fraud elements. Vousinas argues that organizations should pay attention to six elements, namely Fraud Hexagon, while conducting fraud prevention and detection. Stimulus; first element, refers to the external or internal factors motivating fraudsters to commit fraud. This acknowledges the role of broader society such as family, work, and community in the process of fraudulent behaviors. Society contributes to setting certain expectations, norms, and acknowledgement which may not be realistic for some individual, hence a pressure to conduct fraudulent behavior. Capability refers to the skills and knowledge required to commit fraud. This element underlines the importance of identifying cognitive distortions and biases in one's fraudulent behavior. Individuals with lack of technical knowledge, experience, and training are most likely to perpetrate fraud. Hence, imposing compulsory training and education among employees could be an effective way to prevent and detect fraud.

The third element of the fraud hexagon is collusion, which emphasis interpersonal and group dynamics in fraud mitigation endeavors. Opportunity refers to the circumstances surrounding a fraud incident. This element acknowledges the role of external factors such as organizational structure and regulatory frameworks in facilitating or constraining fraud. Rationalization refers to the cognitive and emotional processes that allow fraudsters to justify their behaviors. This element emphasizes the role of self-deception, moral disengagement, wrong belief, inappropriate attitudes and other defense mechanisms of one's personality in committing fraud. Ego refers to the mental process to commit fraud. This element recognizes the role of psychological drive, affection and interpersonal factors such as greed and fear in shaping fraudulent behaviors.

### Method

This research uses a literature review method to understand the Fraud Control System and Fraud Hexagon in formulating effective fraud prevention and detection procedures at BPKP and KemenPAN RB. The sample selection technique used was random sampling, so six government institutions were obtained consisting of three regions and three cities. A literature review was carried out on documents that adopted the implementation of the Fraud Control System, namely the Medan Mayor Regulation, 2022; Bogor Mayor Regulation, 2022; Blitar Regent Regulation, 2022; Situbondo Regent Regulation, 2022; Cirebon Mayor Regulation, 2019; Kebumen Regent Regulation, 2022. A literature review was also carried out on six regulations of each regional government in accordance with Decree No 90/2021, namely Medan Mayor Regulation (b) 2022; Bogor Mayor Regulation(b) 2022; Blitar Regent Regulation (b), 2021; Situbondo Regent Regulation(b, 2022; Cirebon Mayor Regulation(b), 2022; Kebumen Regent Regulation (b, 2021).

## Results and Discussions

I find that both Fraud Control Plan (FCP) by BPKP and Ministerial Decree 90/2021 can be improved for more robust fraud control system. Attributes of FCP and criteria for Integrity Zone, for example, are still used as a template-checklists and are adopted in unison by the government institutions, regardless their different characteristics, complexity and sizes. Moreover, neither BPKP nor KemenPANRB conducts joint assessment to ensure the FCP and Integrity Zone adopted by different government institutions are synergistic toward each-others.

### Fraud Control Plan (FCP) by BPKP

#### Data analysis

This is the most critical component in fraud detection and prevention. In its guidelines, BPKP has not yet explicitly included the data analysis into its 10 criteria. Nevertheless, during the establishment of FCP in the different institutions we scrutinized, data analysis/analytics are evident in all six public institutions. In contrast, KemenPAN has prescribed digital transformation in the decree 90/2021. The ministry accommodated “the use of information technology” as one of the criteria in assessing the Integrity Zone on all of the institutions. Even more, KemenPANRB also utilizes Self-Assessment on the Development of Integrity Zones (PMPZI) which relies assessments conducted by local governments to the ministry. In each regulation, all six government institutions stated that the organizations have indeed integrated information technology into their public services. This emphasis on data analysis can actually complement one another, had the data from KemenPAN RB are also integrated with those of BPKP. However, both ministries work in silo, hindering the optimum use of the valuable databases.

#### Fraud Risk Assessment (FRA)

In the guidelines, BPKP nominated Fraud Risk Based Assessment as one of the FCP’s attributes. This is evident in all the FCPs of public entities I assessed. However, further arrangements on how these risks are identified in the FRA are absent, since FRA in all six institutions are not explained thoroughly, regardless the different nature of each region. On the other hand, KemenPAN RB seemed to focus more on Change Management where it underlines the importance of improving the entire system as well as code of conducts rather than identifying the risks of fraud occurrence. While KemenPANRB’s Change Management can complement the BPKP’s FRA well, neither is conducted synergistically at the national level. Both KemenPANRB and BPKP assess public institutions in silos and establishes regulations which can conflicts with each other, hence creating risks for fraud.

#### Fraud Prevention

Both BPKP and KemenPAN RB focus on prevention strategies, hence, have each established quite comprehensive measures for fraud prevention within government institutions. BPKP has implemented an anti-fraud policy, employee awareness programs, employee code of conducts, and standard operational procedures (SOP) across various government institutions. KemenPAN, on the other hand, has emphasize that every government institution needs to assess employee performance, employee’s perception on corruption, and internal controls in a ministerial decree. While some of these controls from BPKP and KemenPAN RB seem to be overlapped, both frameworks substitute well towards each other. The only control absence, however, is the fraud prevention for the top leadership level. Considering some fraud incidents in Indonesia were involving governors, ministers and head of regions, such omission is quite detrimental for the whole fraud mitigation arrangements in the country.

#### Fraud detection

BPKP recommends employee care, customer and community care, fraud reporting system, whistle blower protection, and external reporting. KemenPAN RB emphasizes the importance by also suggesting implementing a whistleblowing system and promoting public transparency and accountability. Nevertheless, neither prescribed mechanism for fraud detection at regular basis within the government institutions. This is a major gap in the existing fraud control system, as regular data analysis can help to detect anomalies and patterns that may be indicative of fraudulent activities. Likewise, neither BPKP nor KemenPAN RB discuss further on how the government institution should create mechanism for responding to the information from employee care, customer and community care, fraud reporting system, whistle blower protection, and external reporting so that such different sourced information would work effectively in fraud detection process.

#### Fraud Investigation

BPKP has prescribed investigation procedures within each of the government institutions and recommends the use of big data analytics in the investigation process. Such a policy would enhance the efficiency and accuracy of the investigation process. However, the effectiveness of the investigation may be limited by the fact that the internal auditors of the government institution may lack independence. On the other hand, KemenPAN does

not have any investigation procedures in place. This highlights the need for a more holistic fraud investigation framework in Indonesia that can operate effectively across all government institutions, while also ensuring the independence of the investigators to minimize any potential conflicts of interest.

### **Monitoring**

BPKP has imposed that each government institution has a structure of officers in charge, to follow up and be responsible for any fraud incident. Meanwhile KemenPAN focuses on monitoring the improvement of public service quality and development issues. However, neither institution has a national intergovernmental monitoring structure in place.

### **Reporting**

The FCP by BPKP has recommended different fraud reporting system and external disclosure, while KemenPAN relies on public complaints and open access to public information. Unfortunately, neither institution has a national-scaled reporting system where people can report fraud among high-level officials. This highlights the need for a more robust and standardized national reporting system that allows citizens to report any fraudulent activities committed by government officials, without fear of retribution. Such a system could also help to increase public trust and accountability in the Indonesian government, and ensure that those responsible for fraudulent activities are held accountable for their actions.

### **Anti Corruption Digitalization**

BPKP has developed an anti-corruption strategy design and implementation process using digital technology as an instrument for corruption prevention and detection that makes the digital behavior of civil servants and the community the basis for anti-corruption strategy preparation. This anti-corruption digitalization is carried out as an effort to oversee the development of public service information systems so that Ministries, Institutions, Local Governments and Business Entities, Other Entities are aware of corruption risks in order to improve the effectiveness of national development risk management. The findings of BPKP related to anti-corruption digitalization show the following: (1) 28% of fraudsters create unauthorized electronic documents to commit fraud; (2) 25% of fraudsters use altered electronic documents to commit fraud; (3) 22% of fraud cases are hidden using electronic documents; (4) 38% of fraud cases are hidden using physical documents and electronic documents. Based on the findings above, the importance of implementing anti-corruption digitalization because corruption is hidden based on facts revealed through analysis of physical documents and electronic documents.

### **Assessment the Fraud Control System**

As I concluded the result of assessment on the fraud control system, I dig further to determine if Indonesia has some sort of alternative control to compensate the current lacking. Hence, I conduct a behavioral analysis using the Fraud Hexagon, to understand if Indonesia has anticipated fraud incidents through more robust human resources' recruiting, screening and development. I however, again find that Indonesia should advance its current mechanism toward fraud mitigation through human resources upgrade. Stimulus and incentive: both BPKP and KemenPAN have implemented measures to address employee conduct and discipline. BPKP has a code of conduct and employee awareness program, while KemenPAN has a reward and punishment system. The two regulations complement each other. However, more clear rewards such as career promotion or monetary compensation would make government effort to provide compensation for curbing the stimulus of conducting fraud, more effective.

Capability: both BPKP and KemenPAN have programs to improve the capability of public officers. However, they have not yet implemented an evaluation system for detecting fraudulent behaviors among government officers due to over capability. Collusion: Both BPKP and KemenPAN have measures to address collusion, such as whistle-blowing systems, whistle-blower protection, and mechanisms for public complaints. However, neither regulation has addressed the lack of institutional mechanisms for overcoming ever-changing regulations and emergency situations that provides opportunities for fraudsters to override the system under the pretence of emergency.

Rationalization: BPKP has measures to address rationalization, such as a structure for the person in charge, while KemenPAN has a performance assessment system as the basis for one's promotion and transfer. However, none have implemented mandatory psychological check-ups and screening for public officers on a regular basis. Ego: KemenPAN has created a system where all government institutions compete to be nominated as an integrity zone. Any nominated institution will be given certain financial benefits and an award from the president. This competition and the substantial stake may create institutional ego among government organizations to become the most entitled institution with integrity zone.

Overall, it is evident that while BPKP and KemenPAN have proposed various measures to address different aspects of fraud control system, there are still several areas that have not been adequately addressed.

Both regulations established by BPKP and KemenPAN have not utilized data analytics/analysis for fraud prevention at the national level and lack institutional mechanisms to address the ever-changing regulations and emergency situations that create opportunities for fraud. Additionally, there is a lack of national-scaled reporting systems for people to report fraud among high-level officials, and there are no mandatory psychological check-ups for public officers. Addressing these gaps in the fraud control systems of Indonesia's government institutions could significantly enhance their effectiveness in preventing and detecting fraud.

**Table 1.** Summary of Findings on Indonesia's Fraud Control System

<b>Fraud Control System</b>	<b>BPKP</b>	<b>KemenPAN RB</b>	<b>Remarks</b>
Data Analysis,	Audit with Big Data Analytics	Digital transformation	Both BPKP and KemenPAN have used data analysis in fraud detection but not yet utilized Data Analysis into the prevention strategies.
Fraud Risk Assessment, (FRA)	Fraud Risk Management	Change Management	None of the institutions assess FRA at national levels while the government institutions operate in silos
Fraud Prevention,	Anti-fraud policy Employee Awareness Employee Code of Conducts Standard Operational Procedures (SOP)	Employee performance Employee's perception on corruption Internal controls	FRA is more of checklists, and not made specifically to respond to each institution's risk profile There are overlapped and redundancy between fraud prevention by BPKP and KemenPAN RB.
Fraud Detection,	Community Awareness Whistle Blower Protection	Whistle Blowing System Public transparency and accountability	Has not utilized routine audits or data analysis /analytics for detecting fraud incidents at regular basis
Fraud Investigation,	Investigation procedures The use of Big Data Analytics	N/A	Fraud investigation by internal auditors of the government institution lacks the independency
Monitoring	Structure of officer in charge for fraud monitoring	Improvement on public service quality Monitoring on development issues	Has not yet had intergovernmental monitoring structure.
Reporting.	Fraud Reporting System External Disclosure	Public complaint Open access public information	Has not yet had national scaled reporting system where people can report fraud among high level officials

Fraud Control System	BPKP	KemenPAN RB	Remarks
Anti Corruption Digitalization	Developed an anti-corruption strategy design Implementation process using digital technology	N/A	the importance of implementing anti-corruption digitalization because corruption is hidden based on facts revealed through analysis of physical documents and electronic documents.
Fraud Hexagon Stimulus/Incentive	Code of conducts and discipline Employee awareness	Reward and punishment system	Both regulations complement one another.
Capability	Human Resource Development program	Performance based Human resource development program	Both regulations have addressed the improvement of public officers' capability; yet has not yet accommodate promotions/rotations among government institutions, to mitigate frauds due to over capability.
Collusion	Whistle blowing system	Whistle blowing system; Mechanism for online/offline public complaint	Has not yet addressed regular rotations /promotions both within the same institutions and among different institutions.
Opportunity	Community awareness Reporting System	Digital transformation Internal controls Reform/change management Supervision and assurance mechanism Mandatory Financial Wealth Reports	lack of institutional mechanism for overcoming ever-changing regulations and emergency situations
Rationalisation	Responsibility structure	Performance assessment as a basis for one's promotion and transfer.	Not yet had mandatory psychological check-up and screening for public officers
Ego	N/A	Government institutions fulfilling the requirement to be nominated as integrity zones will be given acknowledgement by the president	Has not yet address institutional ego among different government organizations.

## Conclusions

Based on the findings, it can be concluded that the fraud control systems in Indonesia have several strengths but there are several gaps in the current systems. Indonesia has had anti-fraud policies, where both BPKP and KemenPAN have taken steps to prevent, detect, investigate, and report fraud through employee awareness, employee code of conducts, standard operating procedures, and various measures for fraud prevention, detection investigation, and reporting. Nevertheless, some weaknesses have provided the opportunity to



improve the system even better. There are significant weaknesses in the system. The lack of a comprehensive national level Fraud Risk Assessment; the absence of mandatory regular data analysis and the absence of mechanism for a tailor-made fraud risk assessments are among the weaknesses. Additionally, there is a risk of collusion due to the absence of regular rotations and promotions both within and between government institutions.

To improve the fraud control system in Indonesia, several measures should be taken. First, a comprehensive national level Fraud Risk Assessment should be conducted to assess the fraud risks across all government institutions, and measures should be taken to address any identified vulnerabilities. Second, there should be a greater emphasis on using data analysis and analytics in fraud prevention and detection efforts. Third, mechanisms for regular rotation and promotion within and between institutions should be established to minimize the risk of collusion. Furthermore, it is important to note that fraud control systems should be regularly evaluated and updated to keep up with changing fraud trends and threats. Regular psychological check-ups and screening for public officers could also be considered to identify any potential issues before they become a problem. Finally, there needs to be greater intergovernmental coordination to facilitate effective fraud control efforts, including the establishment of a national level reporting system for fraud incidents involving high-level officials. In conclusion, while the fraud control systems in Indonesia have some strengths, there are significant weaknesses that need to be addressed. The recommendations provided in this study can serve as a starting point for improving fraud control efforts in Indonesia, which will help to ensure public trust in the government and prevent the misuse of public funds.

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