

Analysis of E-Procurement Implementation to Prevent Fraud in The Procurement of Goods And Services at The Procurement Beraeu of The Regional Secretariat of East Nusa Tenggara Province

Hana Yohana R P L Zogara^{1*}, Sarinah Joyce Margaret Rafael², Linda Lomi Ga³

{hannarambu@gmail.com^{1*}, joyce.rafael@staf.undana.ac.id², Linda.Ga@staf.undana.ac.id³}

University of Nusa Cendana, Jl. Adisucipto Penfui Kupang, Indonesia^{1,2,3}

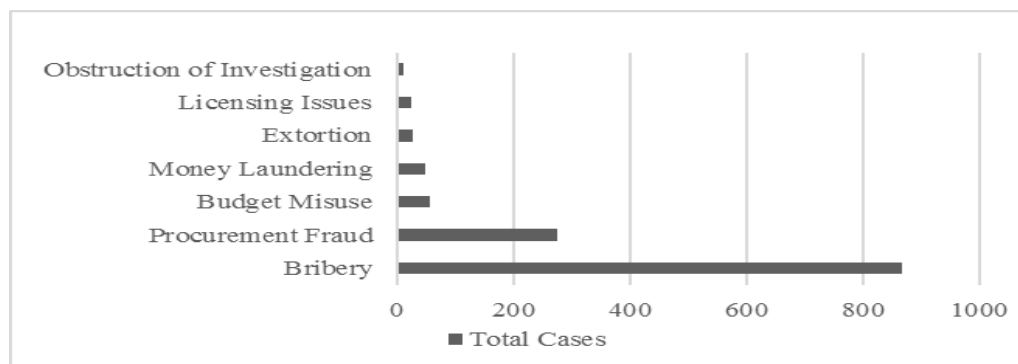
Abstract. This research explores the implementation of e-procurement as a governmental measure to counteract fraudulent practices, particularly corruption, in the procurement procedures of East Nusa Tenggara Province's government. Carried out at the Procurement Bureau of the Regional Secretariat, East Nusa Tenggara Province, this qualitative case study employs in-depth interviews with several informants. The findings reveal a that the implementation of e-procurement aligns with established regulations, yet challenges persist due to a lack of officials proficient in its implementation and inadequate supporting infrastructure. Identified risks include the absence of specific sanctions for procurement fraud, potential collusion during direct encounters with supplier meetings during qualification verification phase, and external threats such as data breaches, misuse of identification credentials, cybercrime, and service disruptions.

Keywords: E-procurement, Fraud, Goods and Services Procurement.

1 Introduction

Corruption is one of the fraudulent activities that consistently captures the attention of the public due to the significant impact it inflicts on society [1]. The referred corruption entails dishonest behavior or the abuse of authority and power to gain personal benefits [2]. In Indonesia, from 2004 to 2022, a total of 1,310 corruption cases have been prosecuted by the Corruption Eradication Commission (KPK). Presented in the table below:

Table 1. Total Prosecutions of Corruption Cases by the Corruption Eradication Commission (KPK) from 2004 to 2022



Based on the data, there were 867 cases of bribery, 274 cases of procurement of goods/services, 57 cases of budget misuse, 49 cases of money laundering, 27 cases of extortion, 25 cases of licensing issues, and 11 cases of obstruction of investigation [3]. Over the past four years, corruption in procurement of goods and services has been the second most frequently handled type of corruption case, with a total of 168 cases [4]. Diverse methods are utilized in cases of corruption in Indonesia especially at East Nusa Tenggara Province, including fictitious projects, abuse of position and interests, extortion, report manipulation, embezzlement, and budget price markups, which are often found in procurement fraud [5].

The procurement sector has become the most susceptible to fraud practices due to the significant amount of money involved and the engagement of influential individuals [6]. Government procurement of goods and services is an activity executed to attain goods and services that can meet the needs of the community and fulfill government's initiative [7]. In Indonesia, the procurement of goods and services is currently governed by Presidential Regulation No. 12 of 2021 on the Amendment of Presidential Regulation No. 16 of 2018 concerning Government Procurement of Goods/Services. Based on the regulation, Government procurement of goods/services aims to fulfill targeted needs, enhance the role of SMEs, and achieve economic equity. The procurement of goods and services implementation must fulfill the planned needs and provide benefits to the government, especially to the community [8]. In reality, Government procurement of goods and services has not yielded maximum benefits and has become a fertile ground for transactive corruption [6].

E-procurement has become a government strategy to address fraud practices such as collusion and nepotism in the procurement of goods and services [9]. E-procurement is an internet-based system used for the electronic procurement of goods and services [10]. The purpose of e-procurement in government procurement, as stated in Article 107 of Presidential Regulation No. 54 of 2010, is to enhance transparency, accountability, efficiency, fair business competition, as well as support supervision and auditing. By implementing e-procurement across all government agencies, the risk of fraud or corruption can be minimized by reducing interactions between the procurement committee and the goods/services providers [11]. However, e-procurement faces several challenges in its implementation. For instance, there is a lack of specific policies in local governments governing the e-procurement mechanism, and the human resources and infrastructure needed to carry out procurement using the e-procurement system are not yet fully

adequate [7]. Moreover, e-procurement carries inherent risks that may open opportunities for fraudulent activities, potentially leading to corruption. These risks include collusion among e-tendering suppliers, conflicts of interest between procurement implementers and e-tendering suppliers, misuse, and manipulation of data within the system, as well as cybercrimes that pose a threat to the e-procurement system [12].

The prevention of fraud through e-procurement must be given careful attention, ensuring that it is conducted transparently and in accordance with ethical standards for procurement of goods and services to achieve the objectives in preventing fraudulent activities [13]. It is essential to note that a crucial factor in the implementation and success of e-procurement is the quality of the human resources involved in the process [14,13]. The term "human resources" in this context refers to the procurement implementation officials who fulfill a technical role and manage all information related to the execution of e-procurement [15]. The implementation of e-procurement in East Nusa Tenggara Province is executed by the Procurement of Goods and Services Bureau of the East Nusa Tenggara Provincial Secretariat, acting as the Working Unit (UKBPI) responsible for overseeing and managing e-procurement processes. The research is conducted within this bureau to analyze the e-procurement implementation, with the goal of preventing fraud and minimizing corruption risks in the procurement of goods and services. Additionally, the research aims to pinpoint the challenges and risks faced by the East Nusa Tenggara Provincial Government during the e-procurement implementation.

2 Literature Review

2.1 GONE Theory

The GONE Theory, developed by Jack Bologna, proposes that fraudulent behavior is not haphazard but driven by four factors: Greed, Opportunities, Needs, and Exposure [16].

1. Greed involves the desire to acquire wealth and pleasures beyond one's current possessions [17].
2. Opportunities create a favorable environment for fraud, with a perception that detection is unlikely [18].
3. Needs occurs with high consumerism has tendencies contribute to fraudulent actions or corruption [19].

Exposure refers to the consequences faced when corruption is uncovered, and lenient consequences can encourage fraudulent behavior [20].

2.2 Fraud

In general, actions that inflict harm on others for personal advantages are categorized as fraudulent behavior [21]. According to SA 240 IAPI, fraud is defined as illegal acts committed by individuals or groups within an organization, as well as third parties, for personal gain through deceit [22]. Fraud patterns during procurement processes can be categorized into various modes, such as bribery from private parties to public officials, collusion among tender

participants, non-competitive selection practices, embezzlement in projects, and inflation of procurement prices [8, 23].

To prevent fraudulent activities in procurement, Tuanakotta suggests implementing the following measures [24]:

1. Establishing a clear, comprehensive, and transparent legal framework.
2. Defining clear responsibilities and functional tasks.
3. Establishing an accountable organization to formulate procurement policies and oversee their implementation.
4. Implementing enforcement mechanisms, including sanctions.
5. Cultivating trained and competent procurement staff.

Leveraging information technology systems can also help combat procurement fraud by reducing opportunities for misconduct and acting as a deterrent [25].

2.3 Governments Procurement of Goods and Services

The procurement of goods and services is an undertaking conducted in both the public and private sectors, intending to obtaining goods and services to support the activities or programs of the respective institutions [7]. In Indonesia, procurement is currently regulated under Presidential Regulation No. 12 of 2021 on the Amendment of Presidential Regulation No. 16 of 2018 concerning Government Procurement of Goods/Services. Based on the regulation, the implementation of procurement involves several implementers, each with specific tasks defined in accordance with Article 8 of Presidential Regulation No. 12 of 2021. These implementers include Budget Users (PA), Authorized Budget Users (KPA), Commitment Making Officials (PPK), Procurement Selection Team, Procurement Officials, and the Goods/Services Procurement Working Unit (UKPBJ).

2.4 E-procurement

E-procurement, as a form of information system technology, can be utilized to promote openness, transparency, and accountability, thereby preventing fraud [14]. E-procurement can reduce the probability of fraudulent activities in procurement processes [26]. E-procurement is defined in various ways:

1. E-procurement is a system that employs internet-based information technology to facilitate the electronic procurement process of goods and services [27].
2. E-procurement as an electronic service that facilitates government procurement of goods/services [28].
3. E-procurement is an internet-based auction system that supports effective, efficient, open, and accountable government procurement of goods/services [29].

In Indonesia, e-procurement implementation began in 2007 until now, supported by Presidential Regulation No. 12 of 2021 on Government Procurement of Goods/Services. E-procurement in Indonesia is managed by the Electronic Procurement Service (LPSE) [30], which acts as an intermediary between suppliers and the procurement service unit (ULP) or the Procurement

Selection Committee responsible for conducting procurement through the e-procurement system [31]. Under the Electronic Procurement Service (LPSE), the e-procurement process for goods/services includes the following steps [9]:

1. Registration of the committee and suppliers.
2. Announcement of the tender, tender documents, and bid documents.
3. Explanation of the tender documents (aanwijzing).
4. Opening of the tender documents and evaluation of objections.

In essence, e-procurement is applied throughout the procurement process, including planning, execution, selection of suppliers, announcement of winners, and reporting through the system [9]. The implementation of e-procurement aims to enhance virtual interaction between suppliers and the procurement committee, reducing the potential for abuse of power and rent-seeking practices in government procurement processes [32]. It also serves as a tool to combat corruption by creating a transparent and efficient procurement performance in terms of time and cost [14].

3 Methodology

The research methodology utilized in this study involves qualitative research with a case study approach. The qualitative approach is utilized to gain an understanding of a particular issue or phenomenon [34]. Through the case study approach, the researcher can focus the investigation on the implementation process of e-procurement conducted by the Procurement of Goods and Services Bureau of the East Nusa Tenggara Provincial Secretariat, aiming to obtain detailed information regarding e-procurement implementation in the procurement process of goods and services in East Nusa Tenggara Province. This approach allows for a clear and comprehensive depiction of the e-procurement implementation in this research.

The data utilized in this study are primarily collected through direct interactions with the informants, also through observation and collecting documentation related to e-procurement. The researcher directly obtained this data from the Head of Goods and Services Management Unit, Head of Electronic Procurement Service Management Unit (LPSE), Head of the Section for Information on Procurement of Goods and Services, and the Procurement Selection Team responsible for e-procurement implementation in the procurement of goods and services in East Nusa Tenggara Province. In addition to primary data, secondary data from various sources, such as journals, articles, books, and other relevant documents on e-procurement, were employed to complement and support the primary data obtained from the research site.

Data analysis in this research employs Miles and Huberman data analysis techniques, including gathering and collecting data, data reduction, data presentation, and data verification. By following these steps, conclusions can be derived from the data analysis results. The data analysis technique utilizes the NVivo application to aid in the process.

4 Result and Discussion

4.1 Implementation of E-procurement

The e-procurement system used in the procurement process of goods and services is the Electronic Procurement of Goods and Services System, abbreviated as SPSE. Since 2010, the implementation of SPSE in the procurement process of the East Nusa Tenggara Provincial Government has been managed by the Electronic Procurement Service Unit (LPSE) under the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat. LPSE is responsible for managing the system designed by the National Public Procurement Agency (LKPP) and implementing SPSE according to the guidelines set by LKPP. SPSE is utilized by suppliers, Procurement Implementation Units (PPK), Procurement Selection Teams, and the Unit of Goods and Services Procurement (UKPBJ) in executing the procurement of goods and services processes in East Nusa Tenggara Province.

The electronic procurement process, according to Tan., et al, includes the following steps: registration of procurement committees and providers, conducting auction announcements, inputting auction documents and bidding documents, providing explanations of auction documents (aanwijzing), opening auction documents, and handling bid objections [9]. E-procurement implementation at the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat begins with the registration of procurement committees and providers using UserID, followed by the submission of procurement documents, auction announcements, explanation of auction documents, selection of providers, announcement of winners, evaluation, and handling of objections.

In accordance with Regulation No. 12 of 2021 from the National Public Procurement Agency (LKPP) regarding the Guidelines for Government Procurement of Goods and Services, the government procurement process begins with procurement planning, procurement preparation, provider selection, contract implementation, and handover. E-procurement utilization in the procurement process of goods and services by the East Nusa Tenggara Provincial Government can be visualized in the following diagram, see **Figure 1**:

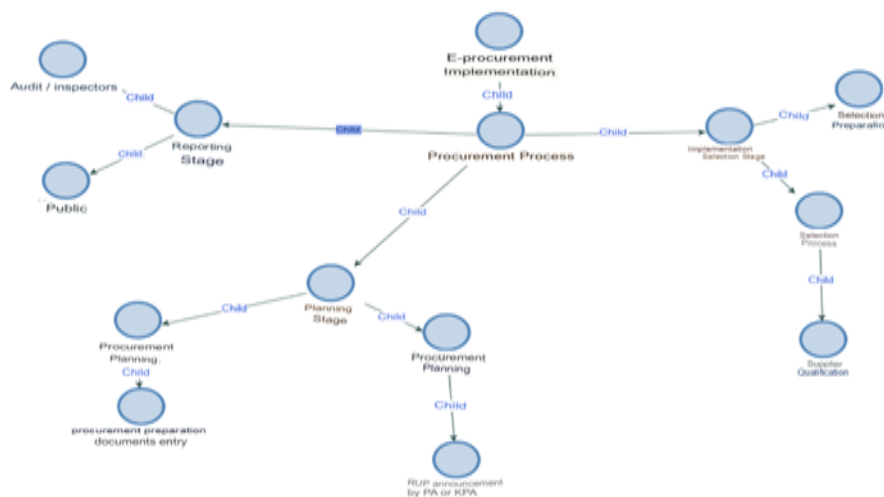


Fig 1. E-procurement implementation in the procurement processes in East Nusa Tenggara Province

The implementation of e-procurement in the procurement process of goods and services by the Provincial Government of East Nusa Tenggara is divided into the following stages: planning stage, implementation and selection stage, and reporting stage.

Planning Stage. In the procurement planning process, which is governed by the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat under SOP No. 23 on Procurement Preparation, e-procurement is utilized by the Procurement Committee (PA/KPA) to announce the General Procurement Plan (RUP) on the SiRUP system managed by LKPP. The implementation of e-procurement in the procurement preparation process is carried out by the Procurement Implementation Unit (PPK) to input procurement preparation documents and detailed information regarding the procurement packages, such as draft contracts, product specifications, and Owner Estimate (EO). These documents and information are entered into the SPSE system by the PPK.

Implementation and Selection Stage. E-procurement is also applied during the selection preparation phase. Selection process occurs after the procurement package data has been completed by the Procurement Implementation Unit (PPK) and announced by the Head of the Goods and Services Procurement Bureau. The Head of the Goods and Services Procurement Bureau then selects the Procurement Selection Team responsible for that specific package through the SPSE system.

The selected Procurement Selection Team carries out preparation activities, including filling in the tender schedule, responding to provider inquiries during the qualification clarification stage, and reviewing the provider's bidding documents on the SPSE system. Once the selection preparation is completed, the SPSE system is used for the selection process, which involves announcing the procurement package, registering providers, and providing qualification document explanations through the system.

Reporting Stage. During the reporting stage, e-procurement is utilized to report the procurement process and status. The public and providers can access information on the procurement status through the East Nusa Tenggara Provincial LPSE website. Additionally, the data available in the SPSE system can be accessed and used by the Supreme Audit Agency (BPK), the Financial and Development Supervisory Agency (BPKP), and the Inspectorate for inspecting the outcomes of the conducted procurement.

In conclusion, at the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat, e-procurement is implemented throughout the procurement process, including procurement planning, selection implementation, and procurement reporting. This implementation enables efficient and transparent procurement of goods and services conducted by the procurement implementers and facilitates access for the public and providers to monitor the procurement status. Additionally, the data available in the SPSE system can be utilized by audit institutions such as BPK, BPKP, and the inspectorate to conduct examinations on the outcomes of the procurement processes.

4.2 E-procurement Challenges

The implementation of e-procurement faces several challenges, including the absence of well-defined regulations from local governments regarding the standardization of digital documents that can be inputted, inadequate understanding of electronic procurement processes among both internal and external human resources, and hardware and infrastructure limitations such as insufficient internet connectivity leading to slow access to the e-procurement system [7]. The challenges in the implementation of e-procurement are presented in the following diagram, see **Figure 2**.

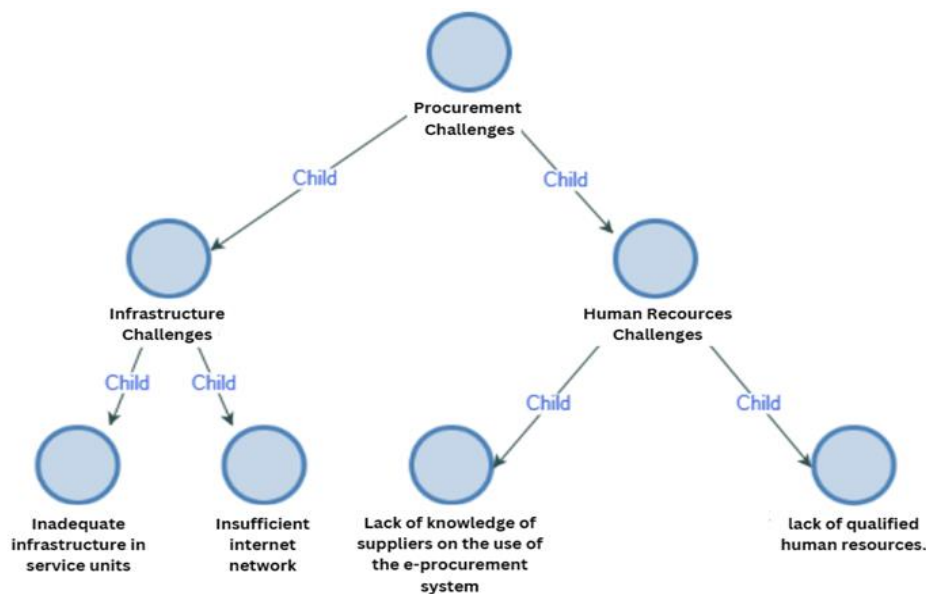


Fig 2. Challenges in Implementing E-procurement in the Procurement processes in East Nusa Tenggara Province

The implementation of e-procurement in the procurement process of goods and services by the Provincial Government of East Nusa Tenggara faces several challenges, including:

Infrastructure Challenges. Issues related to infrastructure are associated with internet connectivity, which inhibits the procurement process through e-procurement. Additionally, challenges arise from inadequate hardware infrastructure in smaller districts or regional units that cannot support the implementation of e-procurement. To overcome infrastructure challenges, the bureau has focused on increasing the bandwidth capacity of the internet network to accelerate access to the e-procurement system and providing infrastructure for internal and external parties to conducting e-procurement implementation. For units lacking proper hardware and internet infrastructure, the bureau provides services in conducting the required procurement packages.

Human Resources Challenges. The challenges related to human resources involve individuals working within the Goods and Services Procurement Bureau and the East Nusa Tenggara Provincial Government, as well as external parties like suppliers. To guarantee the efficient execution of the e-procurement system, it is crucial to have personnel with specialized certifications in electronic procurement management.

The Goods and Services Procurement Bureau does not have sufficient personnel with appropriate certifications to operate the SPSE system, and thus, the system can only be operated by individuals who have undergone specialized technical training for SPSE. In specific units responsible for procurement planning within the government agencies, basic certifications are required to carry out procurement and understand the usage of e-procurement through SPSE. However, not all units have officials with the necessary basic certifications to conduct such procurement, leading to a recurring challenge faced by the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat during the procurement process. Furthermore, the bureau also encounters difficulties as some suppliers have not fully grasped the usage of e-procurement itself.

To address these challenges, especially within the bureau staff, efforts have been made to provide technical guidance through training organized by LKPP. Additionally, competent staff within the bureau offer internal guidance. For units without personnel possessing the basic procurement certification, the bureau provides services in conducting the procurement processes for those units. Furthermore, suppliers experiencing difficulties in using the SPSE system are directed to *LPSE support* on their website to report the challenges they encountered. Suppliers are also given the opportunity to consult with LPSE via email, WhatsApp, helpdesk, or in-person at the office of the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat.

4.3 E-procurement Risk

The execution of government procurement through e-procurement still carries certain risks. E-procurement entails risks that can lead to fraudulent practices in the procurement of goods and services processes, these risks include conspiracies between e-tendering and e-selection providers, conflicts of interest involving Procurement Selection Teams/Procurement Implementation Units (PPK)/Procurement Contracting Officials (KPA)/Procurement Committees (PA) who have personal interests in one or several candidate providers participating in e-tendering, theft or leakage of detailed Owner Estimate (EO) data for the benefit of potential providers/participants in the selection process, misuse of user IDs in e-procurement, manipulation of e-tendering winner data, unauthorized access to e-procurement information, cybercrime, hijacking, and hacking of e-procurement systems [12].

The execution of e-procurement in the procurement of goods and services by the East Nusa Tenggara Provincial Government entails potential risks such as data breaches, misuse of user IDs, cybercrime risks, and potential disruptions to services due to various factors, such as server interruptions caused by power outages, fires in the LPSE service room or server room, forgotten passwords, or procurement officials being unable to conduct procurement directly through SPSE. To mitigate and control the risks associated with e-procurement implementation, the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat has established LPSE standardization and implemented system monitoring by the LPSE Unit to detect anomalies

and identify any fraudulent activities conducted through the SPSE system. It can be concluded that the risks of e-procurement implementation can be addressed through internal controls carried out by LPSE.

In the implementation of e-procurement for the procurement of goods and services by the East Nusa Tenggara Provincial Government, there are still risks of fraud, particularly during the qualification verification phase, which involves direct meetings with suppliers. While Regulation No. 12 of 2021 by National Public Procurement Agency (LKPP) stipulates that qualification verification should be conducted online and offline meetings should only be held when necessary, the procurement process in East Nusa Tenggara Province still prioritizes direct meetings to verify the authenticity and accuracy of documents. According to, traditional procurement processes that involve offline interactions between suppliers and procurement committees can lead to deviations, such as bribery and nepotism [33]. The continued use of face-to-face meetings in the procurement process of the East Nusa Tenggara Provincial Government, although it cannot alter documents already inputted into the system, creates opportunities for collusion between Procurement Selection Teams and suppliers to manipulate tender outcomes. To address the risks of collusion and other fraudulent activities, clear rules and sanctions are needed for violations committed during the procurement process by the East Nusa Tenggara Provincial Government.

The Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat has an ethics council consisting of the Regional Personnel Agency, Legal Bureau, and Inspectorate to follow up on violations of the procurement code of conduct by procurement officials. Sanctions for legal violations committed by employees of the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat are determined by the Head of the Bureau based on the Inspection Report. However, it is unfortunate that specific sanctions for violations in the procurement process of goods and services by the East Nusa Tenggara Provincial Government have not been established. The risks faced during the implementation of e-procurement, combined with the absence of regulations regarding sanctions for fraud in the procurement process by the East Nusa Tenggara Provincial Government, can create an environment where fraud may occur.

5. Conclusion

E-procurement implementation in the procurement process of goods and services by the East Nusa Tenggara Provincial Government takes place in the stages of procurement planning, procurement preparation, selection preparation, and supplier selection. The results of the procurement process are reported and announced on the LPSE website. However, the application of e-procurement in the East Nusa Tenggara Provincial Government still faces challenges, particularly in terms of human resources and infrastructure. Additionally, there are risks associated with e-procurement, such as data breach risks, misuse of user IDs, cybercrime risks, and risks of service disruption. Furthermore, the lack of specific sanctions for violations in the procurement process by the East Nusa Tenggara Provincial Government may encourage fraudulent behavior due to the absence of a deterrent effect from such sanctions.

To address these risks, the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat implements internal controls by establishing Standard Operating

Procedures (SOP) and LPSE Standardization, as well as conducting system monitoring through LPSE. Probity audits by government auditors are also carried out as part of the control measures. For the purpose to prevent fraudulent practice in the procurement of goods and services in East Nusa Tenggara Province through e-procurement, the researcher recommends the following for the researched entity:

1. Prioritize conducting qualification verification meetings in the procurement process of the East Nusa Tenggara Provincial Government electronically whenever possible, resorting to face-to-face meetings only when necessary. This measure aims to prevent fraudulent activities during the procurement process.
2. Relevant authorities should establish regulations for sanctions related to legal violations in the procurement process of the East Nusa Tenggara Provincial Government.

The research has some limitations, as the data obtained is limited to the Goods and Services Procurement Bureau of the East Nusa Tenggara Provincial Secretariat. Future research could focus on further examining the implementation of e-procurement in other regions within East Nusa Tenggara Province, particularly in areas with limited infrastructure and human resources, to explore further preventive measures against procurement fraud in the procurement of goods and services in East Nusa Tenggara Province.

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References

- [1] Z. Zulqarnain, M. Ikhlas and R. Ilhami. (2022). Perception of college students on civic and anti-corruption education: Importance and relevance, *Jurnal Antikorupsi*, vol. 8, no. 1, pp. 123-134.
- [2] M. R. Kurniawan and Pujiyono. (2018). Modus operandi Korupsi Pengadaan Barang dan Jasa Pemerintah Oleh PNS, *LAW REFORM*, vol. 14, no. 1, pp. 115-131.
- [3] A. Nur. (2022). Pemufakatan Fraud Aparatur Negara dan Pelaku Usaha Dalam Keuangan Negara Pada Pengadaan Barang/Jasa Dipandang Dari Perspektif Audit Forensik, *Jurnal Ekonomika dan Bisnis (JEBS)*, vol. 2, no. 3, pp. 656-681.
- [4] ACLC KPK. (2022). Modus Korupsi yang Paling Populer di Indonesia, Komisi Pemberantasan Korupsi.
- [5] A. Petrus. (2020). Dana Desa di Kupang Dikorupsi, Mulai dari Proyek Tandon Hingga Pengadaan Sapi, *Merdeka.com*, [Online]. Available: <https://www.merdeka.com/peristiwa/dana-desa-di-kupang-dikorupsi-mulai-dari-proyek-tandon-hingga-pengadaan-sapi.html> .
- [6] J. Indrawan, A. Ilmar and H. Simanihuruk. (2020). Korupsi Dalam Pengadaan Barang Dan Jasa di Pemerintah Daerah, *Jurnal Transformatif*, vol. 6, no. 2, pp. 127-147.

- [7] R. K. Tanesia. (2018). Studi Efektivitas Pengadaan Barang Dan Jasa Pemerintah Secara Tradisional dan Elektronik, *Jurnal Teknik Sipil*, vol. 14, no. 4, pp. 247-254.
- [8] F. Fitri and Nadirsyah. (2020). Pengaruh Tekanan, Kesempatan, Rasionalisasi dan Kapabilitas Terhadap Kecurangan Pengadaan Barang/Jasa Di Pemerintahan Aceh Dengan Pemoderasi Budaya Etis Organisasi, *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, vol. 5, no. 1, pp. 69-84.
- [9] W. Tan, P. Asmin and A. Situmeang. (2018). Pelaksanaan Layanan Pengadaan Secara Elektronik (LPSE) Di Pemerintahan Kota Batam Dalam Mewujudkan Pemerintahan Yang Efektif, *Journal of Law Policy Transformation*, vol. 3, no. 1, pp. 231-244.
- [10] L. D. Astari, M. Dalatululum, N. Kurniasih, N. D. Indahsari and Y. Kurniasih. (2020). Analisis Penerapan E-Procurement Sebagai Efisiensi Pemerintahan Kota Surabaya, *Jurnal Mahasiswa Administrasi Negara (JMAN)*, vol. 4, no. 1, pp. 66-76.
- [11] A. E. Banea, D. Saerang and J. Warongan. (2020). Analisis Implementasi Sistem E-procurement Dalam Pendeteksian Dan Pencegahan Fraud Di PT. Pertamina RU VII Kasim Sorong, *Jurnal Riset Akuntansi dan Auditing (GOODWILL)*, vol. 11, no. 1, pp. 19-27.
- [12] M. Kamal. (2022). Data Analytics of Procurement Fraud Risks in Indonesia, *Asia Pacific Journal*, vol. 7, no. 2, pp. 185-199.
- [13] H. Sholihin, N. Alim and Prasetyono. (2020). Implementation E-Procurement, Systems and Procedures Fraud Prevention Procurement with Committee Quality Moderating Variable in Madura, *International Colloquium on Forensics Accounting and Governance (ICFAG)*, vol. 1, no. 1, pp. 234-242.
- [14] D. Kartika. (2022). The Impact of E-Procurement Implementation on Public Procurement's Corruption Cases; Evidence from Indonesia and India, *Jurnal Kajian Wilayah*, vol. 11, no. 2, pp. 193-212.
- [15] D. Iswanto, Rifaid, Z. Rusnaedy and Sadar. (2022). After E-Procurement: Is There Still Corruption in the Procurement of Goods and Services?, *International Conference on Social, and Technology*.
- [16] J. Isgiyata, Indiyani and E. Budiyni. (2018). Studi Tentang Teori GONE dan Pengaruhnya Terhadap Fraud Dengan Idealisme Pimpinan Sebagai Variabel Moderasi: Studi Pada Pengadaan Barang/Jasa di Pemerintahan, *Jurnal Dinamika Akuntansi dan Bisnis*, vol. 5, no. 1, pp. 31-42.
- [17] B. Subiyanto, K. Digdowiseioso and N. Mandasari. (2022). Pengaruh Pengalaman Kerja, Skeptisme Profesional, Dan Tipe Kepribadian Terhadap Kemampuan Auditor Dalam Pengungkapan Kecurangan (Fraud), *Jurnal Ilmiah Akuntansi dan Keuangan*, vol. 4, no. 6, pp. 2609-2620.
- [18] F. Febriani and D. Suryandari. (2019). Implementasi Fraud Diamond Theory Terhadap Faktor-Faktor Yang Mempengaruhi Kecenderungan Kecurangan (Fraud): Persepsi Pegawai Dinas Kota Tegal, *Jurnal Akuntansi*, vol. 9, no. 1, pp. 33-46.
- [19] N. Budiman. (2018). Perilaku Kecurangan Akademik Mahasiswa: Dimensi Fraud, *Jurnal Ilmu Akuntansi*, vol. 11, no. 1, pp. 75-90.
- [20] P. Wijayanti and R. Hanafi. (2018). Pencegahan Fraud Di Pemerintah Desa, *Jurnal Akuntansi Multiparadigma*, vol. 9, no. 2, pp. 331-345.

- [21] R. Budiarmaja and Y. Ramadhan. (2022). The Influence of Internal Control, Company SOP and Auditor Professionalism on Fraud Prevention Measures, *Jurnal Akuntansi Riset*, vol. 14, no. 1, pp. 43-62.
- [22] I. Yuri and M. R. Sari. (2022). Fraud Awareness and Fraud Detection-Prevention Methods In The Indonesian Private and Public Sector, *Global Financial Accounting Journal*, vol. 6, no. 1, pp. 100-107.
- [23] V. Mahardhika. (2021). Pertanggungjawaban Pidana Pejabat Pembuat Komitmen Sebagai Upaya Pencegahan Korupsi Pengadaan Barang/Jasa Pemerintah, *Jurnal Hukum Samudra Keadilan*, vol. 16, no. 1, pp. 140-155.
- [24] T. M. Tuanakotta. (2010). *Akuntansi Forensik dan Audit Investigatif*, Jakarta, Salemba Empat, p. 437.
- [25] N. Novianti and Y. Firmanto. (2022). Implementation of Information Technology, Opportunity, and Tendency of Fraud, *Asia Pacific Fraud Journal*, vol. 7, no. 1, pp. 65-74.
- [26] H. Avianto, M. N. Alim and Tarjo. (2019). The Effect of Monopoly Power and Integrity On The Tendency To Commit Fraud In E-procurement," *Asia Pacific Fraud Journal*, vol. 4, no. 1, pp. 112-120.
- [27] H. S. Radianto, Soekarwo, S. Wijoyo, B. O. Abrianto, P. Thalib and P. E. Mulyono. (2020). "Analysis on the implementation of goods/services procurement electronically at District Government, *International Journal of Advanced Science and Technology*, vol. 29, no. 6s, pp. 559-568.
- [28] Ahmad, A. K. Adys and N. Haq. (2020). Implementasi E-Procurement Dalam Pengadaan Barang Jasa Bagian Layanan Pengadaan Barang dan Jasa Pemerintah Sekretariat Daerah Kota Makassar, *Journal of Public Policy and Management (JPPM)*, vol. 2, no. 2, pp. 85-92.
- [29] Jusniati, A. Parawangi and N. Wahid. (2022). Efektivitas E-Procurement (Pengadaan Barang dan Jasa Secara Elektronik) Di Kabupaten Bone, *Kajian Ilmiah Mahasiswa Administrasi Publik*, vol. 3, no. 2, pp. 600-611.
- [30] Alfriandri, M. Heriyanto and F. Yuliani. (2021). Penerapan E-Procurement Dalam Proses Pengadaan Barang/Jasa, *Jurnal Sumber Daya Manusia Unggul*, vol. 1, no. 2, pp. 74-81.
- [31] U. Reginasti. (2018). Tinjauan Pengadaan Barang/Jasa Pemerintah Melalui Sistem Pengadaan Barang/Jasa Elektronik, *Jurnal Pengadaan*, vol. 1, no. 2, pp. 25-35.
- [32] R. A. Benyamin. (2020). Studi Penerapan E-Procurement Dalam Mewujudkan Tata Pengadaan Barang Yang Efektif Di Pemda Provinsi Nusa Tenggara Timur, *Jurnal Politiconesia*, vol. 9, no. 1, pp. 65-83.
- [33] M. M. Habibi and S. Untari. (2018). Efektivitas Pelaksanaan E-Procurement Dalam Pengadaan Barang dan Jasa, *Jurnal Ilmiah Pendidikan Pancasila dan Kewarganegaraan (JIPPK)*, vol. 3, no. 2, pp. 159-168.
- [34] J.W. Creswell. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd ed.), Thousand Oaks, CA: Sage Publications, p. 40.