

## TRANSFORMATION OF THE PROCUREMENT SYSTEM IN THE INDONESIAN GOVERNMENT

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### ABSTRACT

The transformation of Indonesia's procurement system has become a strategic step to improve the effectiveness, transparency, and accountability of governance. In this article, we discuss the shift of the procurement system from corruption-prone manual methods to digitalization through e-procurement and e-catalogue. This transformation started with bureaucratic reform after 1998, the creation of LKPP and the implementation of digital systems such as SPSE, SiRUP, and e-catalog. Kurt Lewin created the framework of the Theory of Organizational Change, which includes three stages: unfreeze (making aware of the need for change), change (making changes), and refreeze (creating new norms). This framework was used to analyze this transformation. This model helps us understand how procurement systems are systematically changed, from finding inefficiencies to making digitalization the new standard in governance. The online content analysis method was used in this research. It combines data from digital platforms, academic reports, government documents and online media articles. The data was analyzed using coding and interpretation methods to find key issues and evaluate how effective the changes to the procurement system were. This method enabled an in-depth understanding of how Indonesia's procurement system is changing. The results show that the transformation requires a holistic approach to ensure sustainability, including regulatory changes, the creation of a blockchain-based system, HR capacity building, and improved evaluation. By combining organizational change theory and a comprehensive methodology, the transformation is expected to become the norm in procurement governance and help sustainable domestic economic growth.

**Key words:** Procurement Transformation, Procurement Digitalization, Procurement Organizational Change

## TRANSFORMASI SISTEM PENGADAAN BARANG DAN JASA DI INDONESIA

### ABSTRAK

Transformasi sistem pengadaan barang dan jasa di Indonesia telah menjadi langkah strategis untuk meningkatkan efektivitas, transparansi, dan akuntabilitas tata kelola pemerintahan. Dalam artikel ini, kami membahas pergeseran sistem pengadaan dari metode manual yang rawan korupsi ke digitalisasi melalui e-procurement dan e-katalog. Transformasi ini dimulai dengan reformasi birokrasi setelah tahun 1998, penciptaan LKPP dan penerapan sistem digital seperti SPSE, SiRUP, dan e-katalog. Kurt Lewin membuat kerangka Teori Perubahan Organisasi, yang mencakup tiga tahap: unfreeze (menyadarkan kebutuhan perubahan), change (melakukan perubahan), dan refreeze (menciptakan norma baru). Kerangka ini digunakan untuk menganalisis transformasi ini. Model ini membantu kita memahami bagaimana perubahan sistem pengadaan secara sistematis dilakukan, mulai dari menemukan inefisiensi hingga menjadikan digitalisasi sebagai standar baru dalam tata kelola pemerintahan. Metode analisis konten daring digunakan dalam penelitian ini. Metode ini menggabungkan data dari platform digital, laporan akademik, dokumen pemerintah, dan artikel media daring. Data dianalisis menggunakan metode pengkodean dan interpretasi untuk menemukan masalah utama dan mengevaluasi seberapa efektif perubahan sistem pengadaan. Metode ini memungkinkan pemahaman mendalam tentang cara sistem pengadaan Indonesia berubah. Hasilnya menunjukkan bahwa transformasi memerlukan pendekatan holistik untuk memastikan keberlanjutan, termasuk perubahan regulasi, pembuatan sistem berbasis blockchain, peningkatan kemampuan SDM, dan peningkatan evaluasi. Dengan menggabungkan teori perubahan organisasi dan metodologi yang komprehensif, transformasi diharapkan menjadi norma dalam tata kelola pengadaan dan membantu pertumbuhan ekonomi domestik yang berkelanjutan.

**Kata Kunci:** Transformasi Pengadaan, Digitalisasi Pengadaan, Perubahan Organisasi Pengadaan

### INTRODUCTION

Government procurement of goods and services plays a strategic role in supporting economic development, public services, and the achievement of the country's goals (Thai, 2001,

2009). Procurement ensures the availability of infrastructure, equipment, and services needed to deliver public services such as health, education, transportation, and security. The government allocates a large amount of budget for procurement, with a transparent and efficient

process, procurement can increase the effectiveness of the use of the state budget for the public interest. Encouraging Economic Growth, Procurement of goods and services opens up economic opportunities for business actors, including Micro, Small and Medium Enterprises (MSMEs). The government as the dominant buyer can create a multiplier effect that supports the development of the private sector and the local economy (Solechan et al., 2024; Thai, 2001, 2009). Professional and transparent procurement can minimize the potential for corruption, collusion and nepotism (KKN) (Williams & Tillipman, 2024). Competitive procurement processes encourage suppliers to offer the best products and services at competitive prices. Procurement supports the development of infrastructure necessary for economic growth and equitable development in different regions. In disaster or pandemic situations, fast and appropriate procurement of goods and services is key to crisis management to protect the public (Edquist, 2015; Edquist et al., 2015; Thai, 2001, 2009).

The transformation of Indonesia's public procurement system plays a strategic role in supporting efficient, transparent and accountable national development (Choirunnisa et al., 2023; Susantya et al., 2022). As one of the essential elements of governance, public procurement covers a wide range of aspects, from infrastructure provision to public services. With major changes in regulation, digitization, and organizational governance, this transformation is a key step in combating corruption, driving domestic economic growth, and ensuring sustainable development (Edquist, 2015; Edquist et al., 2015). Prior to the 1998 reforms, procurement processes were manual and prone to corruption, collusion and nepotism (KKN) (Fahrika & Zulkifli, 2020).

This transformation refers to systematic changes and improvements to the way government procures goods and services, with a focus on efficiency, transparency and accountability (Karttunen et al., 2023; Maulana et al., 2024; Puspita & Gultom, 2024). Procurement transformation aims to improve the efficiency and effectiveness of government operations (Dudić et al., 2024). The use of information and communication technologies, such as e-procurement, can speed up the procurement process, reduce costs, and improve timeliness of procurement, in line with the importance of smooth state operations and prudent use of public funds (Bhullar, 2024; Herold et al., 2023; Susantya et al., 2022). Procurement in government is one of the crucial aspects of state

financial governance that affects the efficiency, transparency, and accountability of the use of public funds. Procurement transformation also integrates sustainability aspects, taking into account the environmental impact of procured goods and services. The government encourages environmentally friendly procurement through green procurement policies (Mota, 2024).

This article discusses the transformation of the procurement system, the scope of the transformation carried out by the Government of Indonesia starting from the establishment of the institution responsible for the procurement of goods and services, supported by policies made by the government to strengthen the transformation of the procurement system, and problems during the transformation of the system. The following are the phases of the transformation of the public procurement system in Indonesia:

### **1. The Era Before Reform (Before 1999): Manual System and Prone to Deviations**

- a. Pre-1990: Procurement of goods and services was done manually, without standardized procedures. This process was prone to corruption, collusion and nepotism (KKN). There was no specialized body to oversee procurement.
- b. 1990s: Several procurement policies were issued, such as Presidential Decree No. 16 of 1994, but their implementation was not maximized due to a lack of transparency.

### **2. 1999-2005: The Beginning of Reforms and Basic System Improvements**

- a. 1999: Presidential Decree (Keppres) No. 18/2000 introduced the principles of efficiency, transparency and accountability in public procurement. The main focus was on law enforcement and eradicating corruption through improved procurement procedures.
- b. 2003: Presidential Decree No. 80/2003 was issued as a legal basis for more structured procurement. Open competition approach was introduced in the procurement process.

### **3. 2005-2010: Initial Digitization and Establishment of National Public Procurement Agency (LKPP)**

- a. 2007: Establishment of LKPP (Public Procurement Policy Agency) through Presidential Decree No. 106/2007. LKPP became an independent institution to manage procurement policy. LKPP is tasked with making policies, building systems, and guiding government agencies in the procurement of goods/services.

- b. 2008: Procurement began to adopt digitalization through the establishment of LPSE (Electronic Procurement Service) to support transparency and efficiency. LPSE was initiated by several ministries/agencies and local governments as pioneers.
  - c. 2009-2010: Web-based e-procurement began to be developed, such as electronic auction systems. This system aims to reduce direct interaction between service providers and users to minimize the risk of corruption.
- 4. 2010-2015: Era of Modernization and Technology Implementation**
- a. 2010: Presidential Decree No. 54/2010 replaces Presidential Decree No. 80/2003, emphasizing electronic-based procurement. Focus on simplifying regulations, increasing competition, and utilizing information technology.
  - b. 2012: Implementation of an e-catalog system by LKPP for frequently needed goods/services. E-catalog speeds up the procurement process and enables transparent price comparison.
  - c. 2014: Strengthening the role of UKPBJ (Goods/Services Procurement Work Unit) in ministries/institutions/local governments as professional procurement management units.
- 5. 2015-2020: Strengthening Regulation and Innovation**
- a. 2015: Presidential Regulation No. 4/2015 simplified the procurement process, including accommodating rapid procurement for urgent needs. Focus on accelerating budget realization through more flexible procurement.
  - b. 2018: Issuance of Presidential Regulation No. 16/2018 as an improvement to Presidential Regulation No. 54/2010. Promotes the principles of value for money, MSME participation, and output-based procurement. SIRUP (General Procurement Plan Information System) is integrated with the procurement process.
  - c. 2019: Implementation of a big data-based procurement system and integration across ministries to monitor efficiency.
- 6. 2020-Present: Digital Transformation and Sustainability**
- a. 2020: During the COVID-19 pandemic, emergency-based procurement is implemented with special procedures (e.g. Presidential Regulation No. 12 of 2021). Digitalization is intensified, including accelerated implementation of sectoral e-catalogues for regional procurement.
  - b. 2021: Perpres No. 12/2021 strengthens the principle of sustainability (green procurement) and supports the involvement of local MSMEs in procurement.
  - c. 2022: Transformation of the national e-catalog to be more inclusive, allowing local suppliers to more easily enter the procurement system.
  - d. 2023-2024: Focus on strengthening procurement governance, integrating digital systems nationwide, and developing the government e-marketplace concept. Blockchain technology-based procurement initiatives are being explored to ensure data security and transparency.

The transformation of the procurement system includes supporting research and innovation, by allocating part of the procurement budget to research products and creative industries (Bosio et al., 2023). Part of the transformation is increasing the capacity and competence of procurement managers through training and certification, ensuring that procurement processes are conducted by competent individuals with integrity. The transformation of the Public Procurement System in the Government of Indonesia is thus a strategic effort to improve the way procurement is conducted, in order to achieve broader development goals (Susantya et al., 2022). This includes aspects of efficiency, transparency, support for local products, sustainability, inclusiveness, innovation, and capacity building, as alluded to in the narrative.

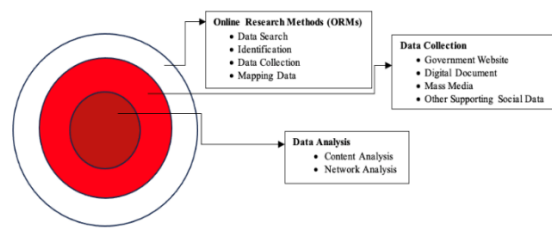
Theoretically, the procurement system transformation process is related to Organizational Change Theory developed by Kurt Lewin, which is one of the classic approaches to understanding and managing change in organizations. The theory emphasizes that change is a dynamic process that requires analysis of social structures, behavioral patterns, and organizational culture. Lewin introduced a three-stage model consisting of: unfreeze, change, and refreeze (Burke, 2023; Lewin, 1951). Kurt Lewin's Theory of Organizational Change provides a simple and effective framework for understanding and managing change. Using the three stages of unfreeze, change, and refreeze, organizations can systematically plan and implement transformation. In the context of the

transformation of the procurement system in Indonesia, this model is relevant because it directs the process of change from a manual system to e-procurement-based digitalization. This transformation includes changes and improvements in procurement procedures with an emphasis on efficiency, transparency, and accountability (Chen et al., 2022).

## METHOD

This study uses the online content analysis method to evaluate the transformation of Indonesia's public procurement system (Reips, 2006). This method allows researchers to systematically analyse online materials, documents, reports, and other relevant data to identify patterns, themes, and insights into the topic under study (Reips, 2012). The data used in this study were collected from various sources, including government documents, such as policies, regulations, and official reports related to public procurement in Indonesia (Reips, 2002). Academic reports that include previous studies and research on procurement transformation (Otte & Rousseau, 2002). Articles from online media, news reports, and other publications that discuss the implementation and development of procurement systems; and data from government digital *platforms*, such as *e-procurement* portals.

Data collection was conducted through a web-based experimentation method, where digital data on public procurement was searched from various government websites, previous research, digital documents, and online media (Reips, 2002, 2012). This approach enabled the collection of comprehensive data relevant to recent developments in Indonesia's public procurement system. Data were analysed using online content analysis techniques, which involve systematic coding and interpretation of online material to describe and infer new findings regarding the transformation of the public procurement system (Grandjean, 2016). The main steps in data analysis include coding to identify key themes and patterns from the data collected, interpretation to draw conclusions based on the coding of the data to gain new insights into the transformation of the procurement system, Social Network Analysis (SNA) which utilises information and facts spread across digital platforms to map social structures and interactions in the procurement system and in-depth qualitative analysis to draw the best conclusions from the case under study (Mortelmans, 2019).



## Research steps for Online Research Methods (ORMs).

Source: Researcher's Processed Results, 2024

This approach provides new insights that cannot be gained from traditional research, as it allows the uncovering of hidden facts in digital materials. By utilising technology and internet searches, this method can provide more accurate and relevant findings on the dynamics of the transformation of the procurement system in Indonesia (Otte & Rousseau, 2002; Widianingsih et al., 2023). The research involved several main steps: data search to identify and collect data from various online sources such as government websites, social media, and digital reports. Data collection from official documents, research reports, online media articles, and *e-procurement* platforms. Data mapping to organise and group data based on key themes and topics related to procurement system transformation. Data analysis using qualitative analysis to explore in-depth insights. Drawing conclusions from the analysis to understand the extent to which procurement system transformation has taken place and its impact on good governance in Indonesia (Grandjean, 2016; Otte & Rousseau, 2002). With this methodology, the research is expected to provide a comprehensive picture of the transformation of the procurement system in the Indonesian government and evaluate the effectiveness and challenges faced in this transformation process.

## RESULTS AND DISCUSSION

### Unfreeze Stage: Creating Awareness of the Need for Change

Before the reformation in 1999, the procurement system in Indonesia was still done manually. Based on the historical sequence of organizational changes in Indonesia, in 1991 the Government through Presidential Decree No. 21 of 1991 changed the structure of the Ministry of Finance, one of which was the establishment of a new organization called Badan Urusan Piutang dan Lelang Negara (BUPLN). During the BUPLN period, the auction unit, or KLN, was previously under the responsibility of the DGT. During the BUPLN period, the emergence of Balai Lelang,

which was fostered and managed by the private sector. The Department of Finance underwent another organizational change in 2000. The new name for BUPLN is DJPLN. The management of State receivables and auctions is the responsibility of DJPLN. In addition, the auction unit changed its name from KLN to KP2LN, the State Receivables and Auction Management Service Office. The latest development occurred in 2006 when Minister of Finance Regulation No. 445/PMK.01/2006 on the Organization of the Ministry of Finance changed DJPLN to the Directorate General of State Assets (DJKN). In addition, KP2LN was transformed into the State Wealth Management and Auction Service Office (KPKNL) at the operational level. One of the reasons why audiences are not familiar with the term auction while the auction mechanism has not undergone much change is the lengthy process of changing the Auction organization (Rumiasih, 2020; Wilantika, 2023).

Based on the results of the analysis of the literature describing the procurement system before the reform, there are four characteristics of the procurement system before the reform: first, the procurement system was carried out manually, starting from planning, auctioning, to evaluation and contracting. There was no electronic system to support the procurement process, so all documents were prepared, submitted, and stored physically. In addition to the manual procurement system, the second characteristic is the lack of standardization so that procurement regulations at that time were only partially regulated, such as through Presidential Decree (Keppres) No. 16 of 1994, which did not include comprehensive procedural standards. The third characteristic is the lack of transparency, closed information related to procurement, such as the need for goods and services or the results of the auction, are not openly announced to the public or service providers. The third characteristic is limited human resource capacity, and unprofessional human resources, such as procurement officials generally do not have specialized training or certification, so they do not understand the principles of efficiency, transparency and accountability in procurement, plus the high administrative burden due to the lack of technological aids makes the administrative process more complicated and error-prone. In this era, procurement is carried out without clear standards, with limited regulations, making it vulnerable to various irregularities (Fahrika & Zulkifli, 2020).

The transformation of the procurement system not only seeks to improve procurement procedures but also to adjust to legal norms that regulate commands or prohibitions in accordance

with legal principles. Transparency and rejection of discriminatory treatment are the main concerns, reflected in the basic principles of public procurement (Obaid & Ali, 2022). Thus, this transformation aims to build a modern government system that is responsive to the needs of the people, while encouraging domestic economic growth through increased use of local products and inclusiveness in business opportunities (Miftah et al., 2023). In the process of system transformation related to organizational change according to (Burke, 2023; Lewin, 1951) begins with the unfreeze process, this first stage aims to prepare the organization for change by creating awareness of the need for change. This involves identifying the need for change and reducing barriers that can hinder the implementation of change. This unfreeze stage is required to build awareness that highlights weaknesses or problems in the existing system so that all parties realize the need for change (Burke, 2023; Lewin, 1951). This stage is characterized by showing inefficiency, corruption, or lack of transparency in the procurement of goods and services (Fahrika & Zulkifli, 2020; Williams & Tillipman, 2024).

Increasing discomfort with the status quo, i.e. disrupting established habit patterns in the organization to create a sense of urgency for change (Burke, 2023; Lewin, 1951). Usually done through data, facts, or analysis results that show that the old system is no longer relevant. Reduce barriers to change (resistance), introducing a compelling new vision so that individuals in the organization are ready to change. Provide training or discussion forums to address concerns or resistance from organizational members. Lewin believed that every organization is in a balance of power between driving forces that motivate change and restraining forces that maintain the status quo. The unfreeze stage aims to reduce the restraining forces and increase the driving forces (Burke, 2023; Lewin, 1951). Starting with Presidential Decree No. 16/1994 on the Implementation of the State Budget, the basis for budget management and procurement was established.

In 1997, Presidential Regulation No. 106 established the institutional framework for procurement policy. Presidential Decrees No. 18 of 2000 and No. 80 of 2003 established procurement guidelines to prevent corruption, collusion and nepotism. Historically, procurement regulations in Indonesia have undergone many changes and improvements. Starting with Presidential Decree No. 11 of 1973, every year a new Presidential Decree is issued regarding the implementation of the State Budget (APBN), which also includes the procurement of goods and

services. Since 2000, a Presidential Decree has been made that specifically regulates procurement, which is a consequence of Indonesia's acceptance of the World Trade Organization (WTO), marked by the ratification through Law No. 7 of 1994 concerning the Ratification of the Agreement Establishing the World Trade Organization (Abbott & Bamforth, 2021; Chen et al., 2022).

### **Stage Change: Implementing Digital Systems and Strengthening Regulations**

Policies related to the procurement of goods and services in Indonesia have a long and dynamic history, starting from the early era of the Indonesian government (Anstis, 2021). At this stage, the regulation of goods and services procurement was carried out through a series of Presidential Decrees that regulated the implementation of the State Budget (APBN). Presidential Decree No. 11 of 1973 was one of the first regulations governing this aspect, and every year thereafter, new decrees were issued to adjust to the increasingly complex needs of state financial management and public procurement. In those early days, procurement policies were still conventional with procedures that tended to be manual and bureaucratic (Križić, 2021). This approach often caused problems in terms of efficiency, transparency and accountability. However, improvements continue to be made as the need for a more structured and modern system increases (Hope et al., 2021).

The second stage Change is the core of the change process, where transformation is carried out by introducing new policies, systems or cultures. At this stage, the organization begins to adapt to new ways of working. Implementation of Change is characterized by involving the implementation of strategic measures designed to achieve change objectives. A real hill from this stage is the Government introducing an e-procurement system to replace manual procurement methods. Next is Building Support, which is important to ensure active engagement from all parties, including organizational leaders, employees, and stakeholders. Intensive communication is required to explain the benefits of change. Then Testing and Adjusting, change rarely goes smoothly from the start. Organizations must be open to adjustments to overcome unforeseen obstacles, this stage the government should adjust the implementation of new technology based on user feedback. According to (Burke, 2023; Lewin, 1951). emphasizes that change requires relearning to replace old habits with new practices. Organizations need to create an environment that supports innovation, experimentation, and learning (Dwinanda et al., 2023; Maulana et al., 2019, 2024).

Public procurement policy in Indonesia began to take shape with Presidential Decree No. 16/1994 on the Implementation of the State Budget, which became the basis for budget management and public procurement. In 1997, Presidential Decree No. 106 established the Public Procurement Policy Institute to provide a more robust institutional framework, although transparency and accountability challenges remain. Presidential Decree No. 18/2000 established guidelines for the implementation of public procurement in government agencies, which was updated by Presidential Decree No. 80/2003. Indonesia faces major challenges in public procurement, including a lack of transparency, weak accountability, and inadequate infrastructure. Cases of corruption in public procurement frequently appear in the media, underscoring the urgent need for procurement system reform (Dudić et al., 2024).

In the late 1990s and early 2000s, numerous reports revealed major corruption scandals in public procurement involving high-ranking officials and costing the state billions of dollars. Regulatory and policy changes in this early era were important steps in the government's efforts to improve and strengthen Indonesia's procurement system, although significant challenges remain to be overcome to achieve better management of public funds with integrity (Karttunen et al., 2023). At this stage, the organization moves from the old pattern to the new pattern by adopting the desired system, process, or behavior (Williams & Tillipman, 2024). This stage is very important because it involves the direct implementation of changes that have been planned in the previous stage (unfreeze). The Change stage in Kurt Lewin's theory is an important phase where the organization begins to transition from the status quo to new conditions (Burke, 2023; Lewin, 1951). The success of this stage depends on the organization's ability to communicate clearly, provide adequate training, mitigate resistance, and provide ongoing support. In its implementation, this stage often requires experimentation and adjustment to ensure that the change goes according to plan.

### **Refreeze Stage: Making the New System the Standard Norm in Governance**

The refreeze stage is the last stage of Kurt Lewin's three-stage model of organizational change (Unfreeze-Change-Refreeze). At this stage, the changes that have been implemented at the Change stage are integrated into the organizational system so that they become new norms or habits. The goal is to stabilize the changes so that the organization does not return to the old pattern (status quo) (Burke, 2023; Lewin, 1951). The transitional era in public procurement

in Indonesia is characterized by the adoption of information and communication technologies to overcome the challenges faced in conventional procurement systems (Edquist et al., 2015; Herold et al., 2023). This transformation started in the early 2000s and was further reinforced by various regulations and policies that led to the digitization of the procurement process. The first steps towards electronic procurement began with the introduction of the concept of e-procurement, where the Indonesian government began to realize that technology could be used to improve transparency, efficiency, and accountability in the procurement of goods and services (Karttunen et al., 2023).

In 2004 to 2005 the Government of Indonesia created the Public Procurement Policy Agency (LKPP) to be established in an effort to develop and manage a more modern and structured public procurement system (Adinata & Ling, 2022; LKPP, 2005, 2024b). The following are the steps taken by the Government of Indonesia in transforming the public procurement system, including:

1. Establishment and role of LKPP (2007)
2. Development of LPSE and e-procurement (2008-2010)
3. E-catalog implementation (2012)
4. Reform of Presidential Regulation No. 16 Year 2018
5. Emergency procurement during the COVID-19 pandemic (2020)
6. Digital-based innovations, such as the use of big data and blockchain

As said by Lewin (Burke, 2023; Lewin, 1951) in the Refreeze stage has Stage Characteristics, namely Stabilization of Change where all elements of change that have been implemented are made a permanent part of the organizational system. Change is no longer considered something new, but rather a routine that is accepted by all members of the organization. Strengthening New Norms, where the new work culture, new processes, or new policies that have been implemented in the previous stage are strengthened so that they are embedded in the organization's operational system. This is characterized by the Government of Indonesia making the e-procurement system which was initially considered an innovation is now a standard procedure in the procurement of goods and services. Furthermore, Resistance Reduction, which is this stage ensures that resistance to change is eliminated by making changes more comfortable and useful for organizational members.

The implementation of the e-procurement system is officially regulated in

Presidential Regulation Number 54 of 2010 concerning Government Procurement of Goods and Services, which was later updated to Presidential Regulation Number 16 of 2018. This regulation requires the use of online applications and platforms for the procurement of goods and services in the public sector. One important implementation is the use of LPSE (Electronic Procurement Services), which provides a platform for government agencies to conduct procurement electronically (Barrad et al., 2020). The use of online applications and systems in public procurement brings a number of significant benefits, namely transparency, where every stage of the procurement process can be accessed and monitored by the public, reducing the potential for corruption and unethical practices. Efficiency, where the procurement process becomes faster and more cost-effective by reducing the need for physical documentation and face-to-face meetings. Accountability, where the digital system records every step in the procurement process, making it easy to audit and evaluate; and fair competition, where the online platform allows more goods and services providers to participate in tenders, encouraging fair competition and better bids.

Conditions in Indonesia during this transition period show serious efforts by the government to reform the procurement system. However, implementation challenges remain great, with corruption cases still frequently appearing in the media. The transformation of procurement policy in the transitional era reflects the government's commitment to creating a more transparent and accountable system. However, infrastructure, user skills and oversight challenges still need to be addressed to ensure better management of public funds with integrity (Kwesi Buor, 2019).

### **The Modern Era**

In the context of the modern era, public procurement in Indonesia has undergone a significant transformation towards pervasive digitalization. This transformation is driven by the goal of improving transparency, efficiency, and accountability in the procurement process. Presidential Regulation No. 16/2018 on Public Procurement started an important step in this change by introducing an e-procurement system that adopts information technology more intensively. Then, in 2021, Presidential Regulation No. 12 prioritized environmental sustainability and the use of local products in procurement. E-procurement, as a component of modern-era policies, facilitates the implementation of electronic procurement processes, reduces the potential risk of corruption that often occurs in face-to-face interactions, and

facilitates access to information for businesses and the general public (Hope et al., 2021).

The implementation of e-procurement has become an important focus of efforts to improve efficiency and transparency in the procurement of goods and services in various sectors, both public and private (Polonsky et al., 2022). The growing support of information technology infrastructure, including increased internet accessibility and enhanced data security, has been a major factor in driving the adoption of online applications and systems, including the implementation of e-procurement (Križić, 2021). Since its launch in the early 2000s, the System for Electronic Procurement (SPSE) has been an important milestone in the development of e-procurement in Indonesia. The platform enables the public procurement process to be conducted electronically, bringing significant benefits in improving efficiency and transparency in the government procurement process. With the adoption of e-procurement, the procurement process can be done faster, with less administrative costs, and allow for wider participation from various parties. Here are the government's steps to transform or change as said by Lewin, namely at the refreeze stage, where the Government establishes new policies and procedures (Burke, 2023; Lewin, 1951). Changes that are documented in the form of official policies, rules, or procedures in order to become a fixed guide for the organization:

1. Digitalization of Procurement System through E-Catalogue: The Government of Indonesia, through the National Public Procurement Agency (LKPP), has developed Electronic Catalog Version 6 to create a more efficient, transparent, and accountable procurement system (LKPP, 2024a, 2024b).
2. Integration of Payment System in E-Catalog: LKPP is integrating the payment system in the Electronic Catalog Version 6 to simplify the procurement process (LKPP, 2024a, 2024b).
3. Acceleration of Procurement Digital Transformation: President Joko Widodo chaired a Limited Meeting on the Acceleration of Digital Transformation Program of Goods and Services Procurement, emphasizing the importance of digitalization in the government procurement process.
4. Increasing the Role of MSMEs in Government Procurement: Based on data from the General Procurement Plan Information System (SiRUP) as of April 30, 2020, the government allocated procurement spending of Rp1,157 trillion, with the total value of packages that can be participated in by Micro, Small, and Medium Enterprises (MSMEs) reaching Rp318 trillion.

5. Policy to Accelerate Digital Transformation: Presidential Regulation No. 17 of 2023 on Accelerating Digital Transformation in Public Procurement assigns PT Telekomunikasi Indonesia Tbk (Telkom) to organize the Electronic Procurement System and its supporting systems.
6. Increased Use of Domestic Products: The Minister of State Apparatus Empowerment and Bureaucratic Reform (PANRB) stated that purchasing domestic products through e-catalog is one of the indicators of bureaucratic reform assessment.

The establishment of new policies and procedures demonstrates the Indonesian government's commitment to transforming the public procurement system through digitization, system integration, and increasing the role of MSMEs and domestic products. The system is also designed to increase the participation of micro, small, and medium enterprises (MSMEs) and cooperatives in government procurement, which in turn supports local economic growth. In the modern era, challenges in public procurement in Indonesia have shifted from issues of corruption and collusion to technical aspects such as technological infrastructure readiness and human resource capacity building. The government's efforts to address these challenges include training and certification for procurement officials and improving technological infrastructure. Procedures for using e-catalogs in the procurement of goods and services are made part of the regulations that must be followed (LKPP, 2024a, 2024b). The following are procurement systems that facilitate the procurement of goods and services, namely SIRUP, BELA PENGADAAN, LPSE, SIKAP, Toko Daring, e-Katalog and SPSE application.



**Figure 3. Digital Goods and Services Procurement System**

In the context of using online applications and systems, data security is a crucial aspect that must be considered (Miller & Lehoux, 2020). The use of encryption technologies, two-factor authentication, and audit trails are important to protect sensitive information related to the procurement process (Graycar, 2019). E-

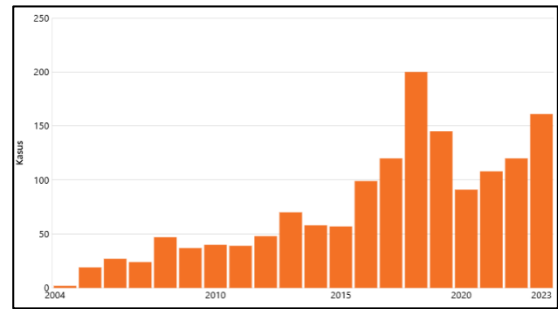
procurement systems and online platforms for tenders and auctions need to be integrated with other existing systems within an organization or entity. This includes integration with accounting systems, inventory management systems, and supply chain management systems to ensure alignment and consistency in overall business processes (Kwesi Buor, 2019).

In addition, the use of online platforms for tenders and auctions has facilitated a more open and competitive procurement process. These platforms provide easier access for sellers and buyers to participate in tender and auction processes, creating a fairer opportunity for small and medium-sized enterprises to compete in the wider market (Abbott & Bamforth, 2021; Edquist et al., 2015). An e-procurement system allows the process of procuring goods and services to be done electronically through the internet. This includes processes ranging from ordering, price negotiation, vendor selection, to payment. The implementation of e-procurement can improve efficiency, transparency, and accuracy in the procurement process. The platform provides a space for interested parties to participate in tenders and auctions, both as sellers and buyers. This opens up opportunities for various parties, including small and medium-sized enterprises, to compete fairly in a wider market (Chen et al., 2022; Edquist et al., 2015). The use of online applications and systems in the procurement process brings greater transparency to the process. Procurement-related documents, including specifications, contracts, and reports, can be easily accessed by interested parties. This increases accountability in the use of public funds and reduces the risk of corruption (Williams & Tillipman, 2024).

### **Corruption as a Bane in the Transformation of Public Procurement in Indonesia**

Corruption in the procurement of goods and services is not only a concern in government circles, but also in the spotlight of various law enforcement agencies and anti-corruption watchdogs (Susantya et al., 2022). The high number of corruption cases in this sector reflects how wide the gaps are that are utilized by individuals to commit irregularities. According to a report by the Corruption Eradication Commission (KPK), they have handled 1,512 corruption cases from 2004 to 2023. In the last two decades, the KPK prosecuted the most corruption

cases in 2018, while the lowest in 2004 as shown in the graph.



**Graph 1 Corruption Cases in 2004-2023**

Based on the graph above, cumulatively, in the 2004-2023 period the KPK handled the most corruption in the form of bribery / gratuities, and procurement of goods / services. The following is a breakdown of corruption crimes handled by the KPK based on the type of case during 2004-2023 (Juliantari, 2022; Nurhayanto, 2023):

1. Gratification/bribery: 989 cases
2. Procurement of goods/services: 339 cases
3. Money laundering crime (TPPU): 58 cases
4. Budget misappropriation: 57 cases
5. Licensing: 28 cases
6. Taxation/extortion: 28 cases
7. Obstructing the KPK process: 13 cases

Public Procurement has become one of the most corruption-prone sectors in Indonesia, making it a wetland for corrupt practices. These cases cover a wide range of large projects, such as infrastructure procurement, land acquisition, and infrastructure projects (Lukacs de Pereny Martens & Schwarz, 2024). This situation shows the urgent need to improve the procurement system to make it more transparent and accountable. One important step is the implementation of digital technology in the procurement process. Corruption in public procurement occurs due to various factors, including the integrity and competence of the human resources involved, non-compliance in inputting procurement data into the system, and system hacking (Dudić et al., 2024). In addition, the Government Internal Supervisory Apparatus (APIP) is often inadequate, information technology audits are not optimal, and the ecosystem for preventing corruption in public procurement is still not well established (Susantya et al., 2022). Pressure from certain interests to obtain projects also adds to the complexity of this problem. To address the problem of corruption in public procurement, the National Public Procurement Agency (NPPA) together with relevant ministries and institutions continue to make various efforts, including digital transformation and simplification of procurement business processes (Nurhayanto, 2023).

Corruption in public procurement not only harms the state financially, but also hinders development and undermines public trust in government (Bhullar, 2024; Williams & Tillipman, 2024). Stricter supervision, strengthened regulations, and increased professionalism of human resources in public procurement are needed. LKPP also continues to develop procurement systems and conduct monitoring and evaluation to ensure better and more efficient procurement of goods and services. The Government Internal Supervisory Apparatus (APIP) also needs to be strengthened in order to carry out supervisory functions more effectively (Juliantari, 2022; Nurhayanto, 2023). In addition, information technology audits need to be optimized to ensure that procurement systems are not vulnerable to hacking and data manipulation. Collaboration between various parties, including the central government, local governments, law enforcement agencies, and the public, is essential in efforts to eradicate corruption in the procurement sector.

## CONCLUSION

The transformation of Indonesia's public procurement system occurred when the government realized that the manual system implemented before the reform had many weaknesses, such as the lack of transparency that opened up opportunities for corruption, collusion, and nepotism (KKN). The inefficiency of manual processes, which slowed down the implementation of goods and services procurement. Lack of standardized standards that made procurement processes non-uniform across agencies. Awareness of the need for change was reinforced by international and domestic pressure to improve governance. Based on Lewin's analysis of organizational change, these unfreeze measures were reflected in the post-1998 bureaucratic reforms, which led to the revamping of procurement governance and the establishment of LKPP in 2007 to lead the change in the national procurement system.

The implementation of a massive transformation in the procurement system, covering aspects of technology, regulation, organization, and work culture. Some of the main changes that took place were the digitization of the procurement system with the development and implementation of e-procurement systems such as SPSE, LPSE, e-Catalog, SiRUP, and SIKaP. These technologies replace manual processes with electronic processes that are more transparent and efficient. Strengthening regulations by issuing policies, such as Presidential Regulation No. 54/2010 and its improvement in Presidential

Regulation No. 16/2018, which introduces the principles of value for money, efficiency, transparency, and MSME participation. Another step taken by the government is to restructure the organization by establishing a Goods/Services Procurement Work Unit (UKPBJ) in each ministry/agency to handle procurement professionally, which is expected to increase human resource capacity through training and certification of procurement officials. Initiatives to empower MSMEs and local products, this is reflected in programs such as the Procurement Bela and the integration of MSMEs into the e-Catalog supporting the increased use of domestic products. According to Lewin, the change stage reflects efforts to transition from old work patterns to a modern, digital, and transparent system.

In the refreeze phase according to Lewin, the government will focus on ensuring that the changes implemented become a stable new norm across government agencies. Some important steps in this stage are the institutionalization of digital systems (Maulana et al., 2024), such as SPSE, e-Catalog, and LPSE are now the operational standards in public procurement. The entire procurement process, from planning to evaluation, is permanently digitized. The next step, internalizing a culture of transparency and accountability in e-procurement, creates a work culture that prioritizes efficiency, transparency, and participation. For example, the public can access procurement information through the LPSE portal. The next step is strengthening evaluation and monitoring, periodic evaluations are carried out to ensure the sustainability of reforms, including overcoming obstacles such as data security and infrastructure readiness in the regions. In this change phase, the government involves the participation of MSMEs and the use of local products to increase spending on local products through e-Catalog is an indicator of the success of refreeze in empowering the domestic economy. The refreeze phase ensures that the new system implemented not only survives, but also functions as an inherent standard in governance.

As a result of all the analysis conducted, this journal recommends that the government should continue to build awareness about the importance of technology-based procurement, especially in underdeveloped regions. It is necessary to analyze resistance to change and create strategies to overcome barriers, such as fears of new technologies. Accelerate the deployment of procurement technology to all regions by improving digital infrastructure and connectivity. Provide more comprehensive training for procurement officials so they can make the most of technologies such as SPSE and e-Catalog.

The study also recommends the government to take several steps to improve the procurement system, firstly the need for innovation in the procurement system, such as the application of blockchain for data security, secondly ensuring the sustainability of changes through regulatory updates, new system development, and monitoring procurement performance. Third, integrate procurement platforms with other systems, such as budget and inventory management, and fourth, increase the role of the public in overseeing procurement to strengthen accountability.

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