

Owned and Borrowed Capacity in Digital Procurement: Evidence from Local Government in Indonesia

Rupina Reni^{1*}, Praptining Sukowati¹, Yuntawati Fristin¹¹Universitas Merdeka Malang, Indonesia**Article History**

Received: 09.08.2026

Accepted: 02.10.2026

Published: 07.10.2026

Journal homepage:<https://www.easpublisher.com>**Quick Response Code**

Abstract: Indonesia's Presidential Regulation No. 46 of 2025 pushes public procurement toward fully electronic, end-to-end processes, yet little is known about how this mandate is enacted in remote regencies. This study examines the implementation of procurement digitalisation through e-procurement at the Goods and Services Procurement Management Unit (UPPBJ) of West Kutai Regency, East Kalimantan, and identifies its supporting and inhibiting factors. Using a qualitative descriptive design guided by George C. Edwards III's implementation model, data were gathered through in-depth interviews with six key informants, observation, and documentation, and analysed with the Miles, Huberman, and Saldaña interactive model. Communication, disposition, and bureaucratic structure function well: outreach and technical guidance are continuous, officials are certified and committed, and the platform itself encodes procedures and deadlines. The persistent weaknesses lie in resources the unit does not own, namely internet connectivity, server stability, national data-centre continuity, and suppliers' digital readiness. We argue that e-procurement disciplines the bureaucracy from within while exposing it to infrastructural fragility from outside, a tension that sharpens at system-enforced submission deadlines. The study proposes distinguishing owned from borrowed capacity within Edwards' resource dimension and recommends connectivity redundancy and explicit contingency protocols.

Keywords: Policy Implementation, E-Procurement, Edwards III, Digital Governance, Public Procurement, Local Government, Indonesia.

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

1. INTRODUCTION

Public procurement is one of the largest channels through which governments spend public money and, for the same reason, one of the areas most exposed to collusion, favouritism, and waste (OECD, 2019; Thai, 2001). Over the past two decades, the digitalisation of procurement has been promoted as a structural remedy for these weaknesses. By moving announcements, bid submission, evaluation, and award onto electronic platforms, e-procurement is expected to reduce face-to-face contact between officials and bidders, standardise procedures, widen participation, and leave an auditable trail of every decision (Neupane *et al.*, 2014; Vaidya *et al.*, 2006). Rigorous evidence lends some support to these expectations. In a comparative study of public works in India and Indonesia, Lewis-Faupel *et al.*, (2016) found that the introduction of e-procurement was associated with better road quality in India and shorter completion delays in Indonesia, together with a larger share of contracts won by firms

from outside the procuring region, even though prices did not fall.

Indonesia has pursued this agenda persistently. The country moved from a largely manual regime under Presidential Decree No. 80 of 2003 to mandatory electronic tendering under Presidential Regulation No. 54 of 2010, and later to the value-for-money paradigm of Presidential Regulation No. 16 of 2018 and its first amendment, Presidential Regulation No. 12 of 2021 (Republic of Indonesia, 2003, 2010, 2018, 2021). The most recent step, Presidential Regulation No. 46 of 2025, constitutes the second amendment to the 2018 framework. It makes the use of the electronic catalogue mandatory whenever the required goods or services are listed, extends the catalogue to consultancy services, recalibrates the ceilings for direct procurement, gives more flexibility to domestic products, and strengthens the requirement that procurement personnel be competent and certified (Republic of Indonesia, 2025).

In short, the regulation signals a shift toward procurement that is digital from end to end.

National mandates, however, do not implement themselves. The implementation literature has long shown that ambitious policies designed at the centre are reshaped, delayed, or diluted as they pass through the organisations and local conditions that must carry them out (Hill & Hupe, 2014; Pressman & Wildavsky, 1973). Indonesian studies of e-procurement confirm that outcomes depend heavily on the organisational and technological context. Sofyani *et al.*, (2020) showed that information technology governance mediates the effect of local government initiatives on service quality, accountability, and transparency; Septiawan (2018) found that technological, organisational, and user factors jointly determine e-procurement success in West Java; and Qomaruddin (2021) highlighted the role of communication and motivation in Surabaya. Yet most of this work was conducted under earlier regulatory regimes and in well-connected municipalities on Java. Much less is known about how the digital procurement mandate is enacted in remote regencies, and, because the regulation is so recent, virtually no empirical study has examined implementation under Presidential Regulation No. 46 of 2025.

West Kutai Regency in East Kalimantan offers a revealing case for addressing this gap. Established under Law No. 47 of 1999, the regency covers approximately 20,381.59 km², or about 15.79% of the province, and has comprised 16 districts since Mahakam Ulu was separated from it in 2013 (Republic of Indonesia, 1999). Its capital, Sendawar, lies deep in the interior of Borneo, where connectivity depends on long terrestrial fibre links. If end-to-end digital procurement is to succeed nationally, it must succeed in places like this, where the physical infrastructure underpinning the platform is comparatively thin.

This study therefore pursues two objectives: first, to analyse the implementation of procurement digitalisation through e-procurement at the Goods and Services Procurement Management Unit (*Unit Pengelolaan Pengadaan Barang/Jasa*, UPPBJ) of West Kutai Regency, using the four variables of Edwards III's (1980) implementation model; and second, to identify the internal and external factors that support and inhibit that implementation. The article makes three contributions. Empirically, it provides an early account of how Presidential Regulation No. 46 of 2025 is being enacted at regency level. Theoretically, it shows that Edwards' resource variable conceals an important distinction between capacity that the implementing organisation owns and capacity that it must borrow from external actors. Practically, it translates this distinction into recommendations for the regency government, the UPPBJ, the electronic procurement service (LPSE), suppliers, and the national procurement agency (LKPP).

2. LITERATURE REVIEW

2.1 Public Policy and the Problem of Implementation

Dye (2013) famously defined public policy as whatever governments choose to do or not to do, a definition that places the consequences of both action and inaction at the centre of analysis. Dunn (2018) situates implementation as one stage in a cycle that begins with problem structuring and ends with evaluation, and he emphasises that the gap between adopted policy and observed outcome is often generated precisely at the implementation stage. Early implementation research took a top-down perspective. Van Meter and Van Horn (1975) modelled implementation as a function of policy standards and objectives, resources, inter-organisational communication, the characteristics of implementing agencies, the economic, social, and political environment, and the disposition of implementers. Mazmanian and Sabatier (1983) added the tractability of the problem and the capacity of the statute to structure implementation. Grindle (1980), writing about developing countries, argued that outcomes depend on both the content of a policy and the context in which it is administered.

Bottom-up scholars shifted attention to the officials who deliver policy. Lipsky (1980) showed that street-level bureaucrats exercise discretion and develop coping routines under conditions of scarce resources, while Sabatier (1986) proposed a synthesis in which both statutory design and local networks matter. Matland's (1995) ambiguity–conflict model provides a particularly useful lens for procurement. When a policy's goals and means are clear (low ambiguity) and actors do not dispute them (low conflict), implementation takes an administrative form in which outcomes are determined chiefly by resources. As the discussion below shows, this prediction fits the West Kutai case closely.

2.2 Edwards III's Model of Policy Implementation

Edwards III (1980) proposed that implementation succeeds or fails according to four interacting variables. *Communication* concerns whether those responsible for implementation know what they are supposed to do; it depends on the transmission of decisions, their clarity, and their consistency over time. *Resources* include an adequate number of staff with appropriate skills, information about how to implement the policy, the authority needed to act, and facilities such as buildings, equipment, and supplies. *Disposition* refers to the attitudes and commitment of implementers, including how personnel are appointed and whether incentives align their behaviour with the policy. *Bureaucratic structure* covers standard operating procedures (SOPs), which routinise implementation, and fragmentation, which disperses responsibility across units.

The model was retained here, as in the original thesis, for three reasons. First, its four variables map

directly onto the components of an e-procurement system, namely regulatory communication, human and technical resources, officials' commitment, and procedural architecture. Second, it has been widely applied in Indonesian public administration research, which facilitates comparison with previous studies (Qomaruddin, 2021). Third, its organisation-centred orientation makes it possible to test where the boundary of the implementing organisation lies, a question that proved central to the findings.

2.3 E-Procurement, Digital Governance, and System-Level Bureaucracy

E-procurement is commonly defined as the use of internet-based systems to carry out some or all stages of the procurement cycle, from planning and announcement to evaluation, contracting, and reporting. Vaidya *et al.*, (2006) identified critical success factors for public sector e-procurement, including end-user uptake, supplier adoption, re-engineering of business processes, system integration, security, and performance measurement. Their emphasis on supplier adoption is important because it recognises that an e-procurement system has two user communities, only one of which is under the authority of the procuring organisation. Neupane *et al.*, (2014) showed that officials' willingness to adopt e-procurement is shaped by perceptions of its capacity to reduce corruption, linking technological adoption to integrity goals. From the perspective of diffusion theory, adoption also depends on the relative advantage, compatibility, complexity, trialability, and observability of an innovation (Rogers, 2003).

At a broader level, digital-era governance scholarship argues that information technology reintegrates fragmented administrative functions and reorganises the state around digital processes (Dunleavy *et al.*, 2006), while Mergel *et al.*, (2019) describe digital transformation as a change not only in tools but in processes, services, and relationships. Bovens and Zouridis (2002) offer a sharper claim. As decision processes are embedded in software, public organisations evolve from street-level to screen-level and finally to system-level bureaucracies, in which much of the discretion formerly exercised by frontline officials migrates to system designers and to the rules coded into the platform. Busch and Henriksen (2018), reviewing research on digital discretion, confirm that ICT tends to

curtail frontline discretion in routine tasks. Fountain (2001) cautions that such technologies are always enacted through existing institutional arrangements, and Heeks (2003) shows that e-government projects frequently fail because of gaps between the assumptions built into a system's design and the realities of the setting in which it is deployed, including gaps in physical infrastructure. These perspectives suggest that the success of e-procurement should be assessed not only within the implementing organisation but also at its interface with the infrastructure and users on which it depends.

E-procurement also carries normative expectations from public service theory. The New Public Service emphasises serving citizens and building accountability through transparency and participation (Denhardt & Denhardt, 2000), while the reinventing government agenda framed technology as a means to make bureaucracies more results-oriented (Osborne & Gaebler, 1992). In Indonesia, Law No. 25 of 2009 on Public Services codifies transparency, accountability, participation, equal treatment, and efficiency as guiding principles (Republic of Indonesia, 2009).

2.4 Regulatory Framework of Indonesian E-Procurement

Indonesia's procurement framework is layered. Law No. 11 of 2020 on Job Creation provides the statutory impetus for simplification, digitalisation, and the empowerment of micro, small, and medium enterprises (MSMEs) in procurement (Republic of Indonesia, 2020). Presidential Regulation No. 16 of 2018 sets the core principles of efficiency, effectiveness, transparency, openness, competition, fairness, and accountability, and it requires procurement to be conducted electronically through LPSE (Republic of Indonesia, 2018). Presidential Regulation No. 12 of 2021 strengthened domestic-product preferences and MSME participation (Republic of Indonesia, 2021), and Presidential Regulation No. 46 of 2025 extended the mandatory use of the e-catalogue, adjusted direct-procurement ceilings to IDR 200 million for goods and other services and IDR 400 million for construction, and required government institutions to plan for certified procurement personnel (Republic of Indonesia, 2025). Table 1 summarises this evolution.

Table 1: Evolution of E-Procurement in Indonesia

Year	Legal basis / policy	System development	Key features
2003	Presidential Decree No. 80/2003	Manual procurement	First comprehensive guideline for government procurement; not electronic
2004-2005	Early initiatives and pilot projects	E-procurement trials	Electronic tendering introduced in selected central agencies
2007	Establishment of LKPP (Presidential Regulation No. 106/2007)	Institutional strengthening	LKPP becomes the national procurement policy and systems agency
2008-2009	Development of SPSE	LPSE roll-out	LPSE units established in ministries, agencies, and local governments

Year	Legal basis / policy	System development	Key features
2010	Presidential Regulation No. 54/2010	E-tendering mandated	Electronic procurement becomes a national obligation
2012-2014	Development of the e-catalogue	E-purchasing	Direct purchasing through electronic catalogues begins
2015	Presidential Regulation No. 4/2015	SPSE refinement	Expanded obligation to use e-procurement
2018	Presidential Regulation No. 16/2018	System transformation	Value-for-money paradigm; strengthened role of procurement units
2021	Presidential Regulation No. 12/2021	Wider digitalisation	Simplification, acceleration, MSME and domestic-product preferences
2023-2024	Local e-catalogue and government marketplace	Digital ecosystem	Integration with SiRUP, the latest SPSE, and regional financial systems
2025	Presidential Regulation No. 46/2025	End-to-end procurement	Mandatory e-catalogue use, certified personnel, revised thresholds, local content flexibility

Source: Compiled from the thesis data and the regulations cited (Republic of Indonesia, 2003, 2007, 2010, 2015, 2018, 2021, 2025).

2.5 Previous Studies

Table 2 summarises the studies that most directly inform this research. Domestic studies have consistently associated e-procurement with greater transparency, efficiency, and fraud prevention, but most of them rely on literature reviews or surveys and treat e-procurement as an independent variable rather than as a

policy being implemented. International studies add causal evidence on outcomes and highlight supplier adoption as a condition of success. None of them examines implementation under Presidential Regulation No. 46 of 2025, and none focuses on a remote regency where the infrastructure supporting the platform is fragile.

Table 2: Summary of Previous Studies

No	Author(s) and year	Method	Main findings	Relevance to this study
1	Aprilla <i>et al.</i> , (2024)	Literature and regulatory document review	Digital technology, including e-procurement, increases transparency, encourages public participation, and strengthens accountability; bureaucratic culture remains an obstacle	Frames e-procurement as part of digital governance oriented to transparency
2	Mu'ah <i>et al.</i> , (2024)	Quantitative survey, regression/SEM	E-procurement reduces procurement fraud and increases transparency and accountability, supporting good governance	Establishes transparency as a core outcome of e-procurement
3	Setiawan <i>et al.</i> , (2024)	Quantitative survey, regression	E-procurement improves cost and time efficiency and transparency because all stages can be traced	Supports efficiency and traceability as expected benefits
4	Az-zahra <i>et al.</i> , (2024)	Qualitative, inductive literature study	E-procurement simplifies procedures, saves time and cost, and improves process effectiveness	Provides propositions that can be examined empirically at unit level
5	Assa Veronica (2023)	Quantitative	Use of the electronic procurement system has a positive effect on employee work efficiency in the North Sulawesi LPSE	Links system use to staff efficiency, relevant to the resource variable
6	Vaidya <i>et al.</i> , (2006)	Systematic literature synthesis	Identifies critical success factors including end-user uptake, supplier adoption, process re-engineering, and system integration	Highlights supplier readiness, which emerged as an external obstacle
7	Neupane <i>et al.</i> , (2014)	Survey, PLS path modelling	Perceived anti-corruption benefits shape willingness to adopt e-procurement	Explains the positive disposition of implementers
8	Lewis-Faupel <i>et al.</i> , (2016)	Quasi-experimental, India and Indonesia	E-procurement improved quality (India), reduced delays (Indonesia), and increased non-local winners, without lowering prices	Provides causal benchmark for expected outcomes in Indonesia

Source: Adapted from the thesis literature review and supplemented with international studies.

2.6 Conceptual Framework

Building on the preceding review, the study conceptualises Presidential Regulation No. 46 of 2025 as the policy input that the UPPBJ of West Kutai must translate into practice. The quality of this translation is examined through Edwards III's four variables. Their operation is shaped by internal and external supporting

and inhibiting factors, which together determine whether the expected procurement outcomes of transparency, effectiveness, and accountability are achieved (Figure 1). The framework deliberately separates the factors located inside the implementing organisation from those located outside it, so that the analysis can identify where the binding constraints of implementation actually lie.

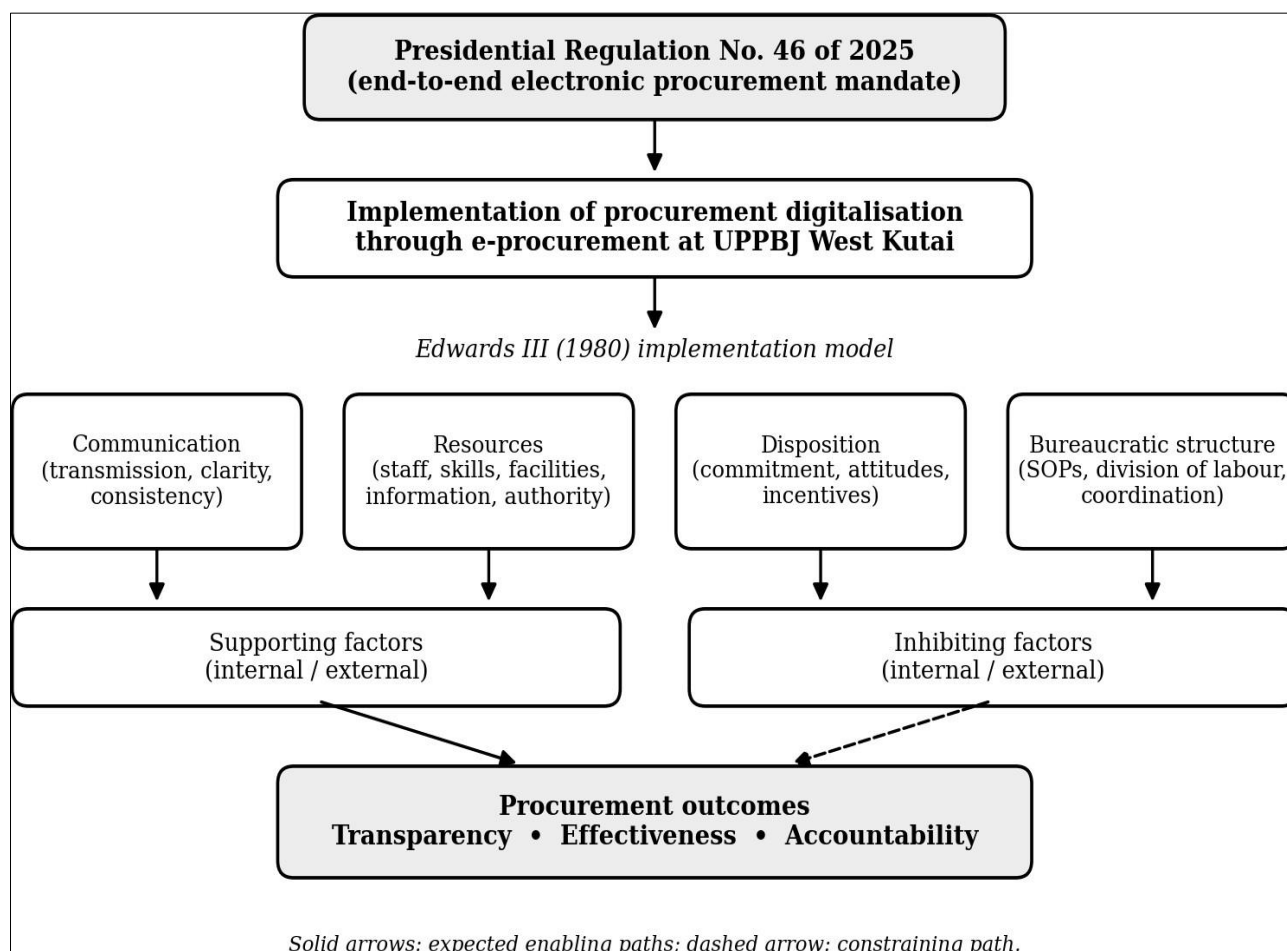


Figure 1: Conceptual Framework of the Study

Source: Developed by the authors based on Edwards III (1980) and the thesis framework.

3. RESEARCH METHODS

3.1 Research Design

The study employed a qualitative descriptive design. This approach was chosen because the research sought to understand how a policy is enacted by people, organisations, and information systems in a specific setting, rather than to measure the magnitude of predefined relationships. A qualitative design allows implementation to be reconstructed from the accounts of those who carry it out, and it is suited to identifying mechanisms and tensions that are not visible in aggregate indicators (Miles *et al.*, 2014).

3.2 Research Site and Informants

The research was conducted at the UPPBJ of West Kutai Regency, East Kalimantan. The site was

selected purposively because the regency has implemented e-procurement under Presidential Regulation No. 46 of 2025 and because its remote location makes it an informative setting for examining the infrastructural preconditions of digital procurement. Informants were selected through purposive sampling based on five criteria: direct involvement in e-procurement implementation, at least one to three years of relevant experience, a position that provides access to decision-making or core operational information, willingness to be interviewed openly, and recognised competence within the organisation. Six key informants met these criteria (Table 3). To protect confidentiality, informants are referred to by codes.

Table 3: Profile of Research Informants

Code	Position	Functional role	Relevance to e-procurement
I1	Head of the Goods and Services Procurement Division	Structural leadership	Oversees policy direction, coordination with LPSE and regional agencies
I2	Head of the Procurement Management Subdivision	Structural management	Manages daily procurement administration and inter-unit coordination
I3	Member of the Selection Working Group (Pokja)	Procurement Officer, Junior Expert	Conducts electronic tendering and bid evaluation
I4	Member of the Selection Working Group (Pokja)	Procurement Officer, Junior Expert	Conducts electronic tendering and bid evaluation
I5	Member of the Selection Working Group (Pokja)	Procurement Officer, Junior Expert	Conducts electronic tendering and bid evaluation
I6	Member of the Selection Working Group (Pokja)	Policy Technical Analyst	Conducts electronic tendering and reporting

Source: Primary data (processed), 2026.

3.3 Data Collection

Data were collected over two months, from April to May 2026, using three techniques. In-depth, semi-structured interviews explored each informant's experience of policy communication, resources, attitudes, procedures, supporting factors, obstacles, and coping strategies. Direct observation focused on how the Selection Working Group operated the Electronic Procurement System (SPSE) during tendering. Documentation covered the text of Presidential Regulation No. 46 of 2025 and related regulations, UPPBJ organisational documents, procurement package data from SPSE and the General Procurement Plan Information System (SiRUP), and official records of LPSE/SPSE service disruptions.

3.4 Data Analysis

Data were analysed using the interactive model of Miles *et al.*, (2014), which comprises three concurrent streams. During *data condensation*, interview transcripts, field notes, and documents were selected, focused, and coded, first deductively according to Edwards' four variables and then inductively for supporting and inhibiting factors. During *data display*, the condensed data were organised into matrices that compared informants' accounts across variables and factor categories; several of these matrices are presented as tables in this article. During *conclusion drawing and verification*, patterns and tensions were interpreted and repeatedly checked against the raw data and documentary evidence.

3.5 Trustworthiness

Trustworthiness was addressed using the criteria of Lincoln and Guba (1985). Credibility was strengthened through source triangulation across structural leaders and Selection Working Group members, method triangulation across interviews, observation, and documents, careful attention to deviant

cases, and member checking with informants. Transferability was supported by a detailed description of the setting. Dependability was ensured by maintaining an audit trail of raw data, condensed data, and analytic memos, and confirmability was pursued by verifying that each conclusion could be traced back to the data rather than to the researcher's expectations.

4. RESULTS

4.1 Research Setting

Procurement in West Kutai is organised around the Goods and Services Procurement Division, which comprises the Head of Division, the Head of the Procurement Management Subdivision, the Selection Working Groups (Pokja), an SPSE administrator, and supporting personnel. The unit's stated vision is to realise government procurement that is professional, transparent, effective, efficient, and accountable through the use of information technology. Its missions include improving service quality, optimising the use of information technology, developing the competence of procurement personnel, strengthening transparent and accountable governance, and supporting government free from corrupt practices.

The national procurement landscape underlines why regency-level implementation matters. According to the SPSE/SiRUP data compiled for the thesis, regency governments account for by far the largest number of procurement packages of any institutional category nationwide (Table 4). Regency governments recorded 2,343,941 packages, consisting of 1,688,570 packages procured through providers, 632,581 self-managed packages, and 22,790 provider packages within self-management. This volume is more than three times that of ministries. The quality of e-procurement in Indonesia therefore depends substantially on how units such as the UPPBJ of West Kutai operate.

Table 4: Distribution of Procurement Packages by Institutional Category (SPSE/SiRUP)

Institutional category	Number of packages	Remarks
Regency governments	2,343,941	Largest category: 1,688,570 through providers; 632,581 self-managed; 22,790 provider within self-management
Ministries	676,109	Second largest category
City governments	674,326	Comparable to ministries
Provincial governments	458,583	—
Non-ministerial institutions	221,132	—
SOEs, regional SOEs, PTNBH, other	Relatively small	Minor share compared with local governments

Source: Secondary data from SPSE/SiRUP, compiled in the thesis (2026).

4.2 Communication

All informants described policy communication as continuous and multi-channel. The Head of Division explained that outreach is conducted routinely for regional agencies and suppliers through coordination meetings, technical guidance sessions (*bimbingan teknis*), application training, and direct assistance whenever problems arise, with the aim of ensuring that users understand regulatory changes and the operating procedures of the system (I1). The Head of Subdivision added that communication intensifies whenever regulations change or technical problems occur, with rapid consultation among regional agencies, the Selection Working Group, and LPSE (I2).

In Edwards' terms, the transmission of the policy is effective, and its clarity is reinforced by hands-on training rather than by circulars alone. Consistency is maintained through scheduled coordination and through follow-up whenever the system encounters problems. Communication, however, is not limited to one-way transmission. Selection Working Group members described informing bidders promptly when the system is disrupted and directing them to follow the applicable rules (I3, I4), so communication also operates as a problem-solving channel that extends to suppliers. The only qualification concerned timing. Although most staff understand the policy well, some still need assistance whenever the application is updated or regulations change (I2). This finding suggests that clarity is repeatedly disrupted by the pace of platform and regulatory change rather than by any weakness in how messages are transmitted.

4.3 Resources

Resources presented a sharply divided picture. With respect to human resources, the accounts were uniformly positive. The Head of Division stated that most personnel have attended training or obtained procurement certification and that capacity building continues through advanced training and regular updates on regulations and applications (I1). All four Selection Working Group members confirmed that they hold government procurement certificates, have experience operating the electronic system, and follow regulatory and system updates (I3–I6). This profile is consistent with the emphasis of Presidential Regulation No. 46 of 2025 on competent and certified procurement personnel.

Facilities were described as basically adequate, including computers, internet connections, servers, and procurement applications, but every informant qualified this assessment. The Head of Division reported that internet quality is still unstable at certain times, which can affect access to the system (I1). The Head of Subdivision noted recurrent disruptions of the network and server access that slow the procurement process (I2), and Selection Working Group members cited server maintenance and application problems (I4, I5). The thesis data identify mass outages caused by severed fibre-optic cables as the most serious form of disruption. The resource variable is therefore strong where it depends on the organisation's own investment in people and weak where it depends on physical and digital infrastructure beyond the unit's control.

4.4 Disposition

Implementers displayed a strongly positive disposition. The Head of Division attributed officials' commitment to their recognition that electronic systems increase transparency, accountability, and efficiency while reducing administrative errors and irregularities, and he described this commitment as expressed through procedural compliance, consistent system use, and willingness to attend training (I1). The Head of Subdivision described a typical adoption trajectory. The transition from manual to digital work initially required adjustment, but once staff became accustomed to the system they found that work was easier, administration faster, documents better organised, and errors less likely (I2).

Selection Working Group members valued the system for insulating them from pressure. One explained that e-procurement reduces direct interaction between the committee and providers, thereby increasing objectivity in the process (I3). Another emphasised that the digital record of every activity makes supervision and audit easier (I5). These statements suggest that disposition is sustained not only by compliance but by perceived self-interest. The platform protects officials by making their decisions defensible. Resistance to the system was not reported by any informant.

4.5 Bureaucratic Structure

The most distinctive finding concerns the way the platform has absorbed bureaucratic structure.

Informants reported that all stages of procurement, from needs planning and document preparation to announcement, provider selection, bid evaluation, award, and reporting, are carried out in SPSE (I1, I2). Selection Working Group members described the resulting procedures as more systematic because every stage follows the workflow provided by the system:

"We simply follow the available flow, from preparation to the determination of the winner" (I4, Interview, 2026).

They also described the work as more disciplined because:

"every stage has a time limit set in the system" (I5, Interview, 2026).

Coordination among the Procurement Division, the Selection Working Groups, LPSE, and regional agencies was reported as routine and responsive (I2).

In Edwards' framework, SOPs are the principal structural instrument for routinising implementation. In West Kutai, these SOPs no longer exist primarily as paper documents interpreted by officials. They are encoded in the platform's sequence of stages, access rights, and deadlines. Structural fragmentation is limited because responsibilities are allocated through system roles. Table 5 presents representative statements for each of Edwards' variables.

Table 5: Representative Informant Statements by Implementation Variable

Variable	Representative statement (translated)	Informant	Interpretation
Communication	"Outreach is carried out routinely ... through coordination meetings, technical guidance, application training, and direct assistance whenever there are problems."	I1	Multi-channel transmission with hands-on clarification
Communication	"Some employees still need assistance, especially when there are system updates or regulatory changes."	I2	Clarity is interrupted by the pace of change
Resources (staff)	"All members of the Pokja have attended training and hold government procurement certificates."	I4	Owned capacity is strong
Resources (facilities)	"There are still problems with internet quality that is unstable at certain times, which can affect access to the system."	I1	Borrowed capacity is fragile
Disposition	"The system reduces direct interaction between the committee and providers, thereby increasing objectivity."	I3	Commitment reinforced by self-protection
Bureaucratic structure	"Digitalisation has made work procedures more disciplined because every stage has a time limit set in the system."	I5	SOPs encoded in the platform

Source: Primary data (processed), 2026.

4.6 Supporting and Inhibiting Factors

The factors identified by informants are summarised in Table 6. Internal supporting factors include certified and competent personnel, officials' commitment, leadership support, adequate office facilities, and effective coordination among the Procurement Division, the Selection Working Groups, LPSE, and regional agencies. External supporting factors include the legal certainty provided by Presidential Regulation No. 46 of 2025 and its derivative guidelines, the regency government's commitment to digital governance, and the availability of an integrated national procurement platform.

Inhibiting factors reveal a clear pattern. The internal obstacles are uneven IT proficiency among some system users and technical problems with the application and server. The external obstacles are unstable internet connectivity, including outages caused by severed fibre-optic cables, suppliers who upload bids close to the deadline or make errors when uploading, and dependence on LPSE and national infrastructure. Informants linked these obstacles directly. As one Selection Working Group member observed, participants who upload documents close to the deadline risk failed uploads whenever the network has problems (I6). Another noted that some suppliers do not fully understand the electronic system and frequently make mistakes when uploading documents (I4).

Table 6: Supporting and Inhibiting Factors of E-Procurement Implementation

Category	Internal (within the UPPBJ)	External (beyond the UPPBJ)
Supporting factors	Certified and competent procurement personnel Commitment of officials and leadership support Computers, devices, and office facilities Effective coordination among	Legal certainty from Presidential Regulation No. 46/2025 and derivative guidelines Regency government commitment, supporting policies, and guidance to agencies Integrated national platform (SPSE, e-catalogue, SIRUP)

Category	Internal (within the UPPBJ)	External (beyond the UPPBJ)
	the Procurement Division, Pokja, LPSE, and regional agencies	
Inhibiting factors	Uneven IT proficiency among some system users Adaptation required after application updates and regulatory changes Technical problems in the application and server	Unstable internet connectivity, including mass outages from severed fibre-optic cables Suppliers uploading bids close to the deadline or making upload errors Dependence on LPSE support and national data infrastructure
Coping strategies	Periodic training and technical guidance; direct assistance to agencies	Escalation to LPSE and system administrators; prompt information to bidders; urging suppliers to upload early

Source: Primary data (processed), 2026.

Documentary evidence confirms that infrastructural disruption is a systemic rather than purely local risk. Official records compiled in the thesis show that the most significant national disruption to LPSE/SPSE services during 2023–2026 occurred in 2024, when a failure at the National Data Centre (*Pusat*

Data Nasional, PDN) rendered many government applications, including a number of LPSE services, temporarily inaccessible, delaying access to tender documents, bid submission, and evaluation (Table 7). In the other years, disruptions were local or took the form of scheduled maintenance.

Table 7: LPSE/SPSE Service Disruptions, 2023–2026

Year	Documented national disruption	Impact on LPSE	Remarks
2023	No major national disruption announced by LKPP	Normal	SPSE operated normally; disruptions were local to individual LPSE units
2024	Disruption of the National Data Centre (PDN)	High	Many government applications, including several LPSE services, were inaccessible during recovery
2025	No report of a major national disruption	Low	Disruptions mostly took the form of periodic maintenance
2026	No report of a major national disruption to date	Low	System operating with periodic maintenance and security upgrades

Source: Secondary data (2026), compiled in the thesis.

5. DISCUSSION

Read variable by variable, the results would support a simple conclusion: all four of Edwards' conditions are largely satisfied, and implementation in West Kutai is proceeding well. This conclusion is accurate but incomplete. The more revealing finding lies in the pattern that cuts across the variables. Every variable that depends on what the UPPBJ itself controls, including how it communicates, whom it trains, how its officials think, and how its work is organised, is strong. Every recurrent weakness is located where the organisation depends on something it does not control, such as the fibre link, the server, the national data centre, and the supplier at the other end of the upload. The same platform that disciplines the bureaucracy from within exposes it to fragility from outside. This section develops that tension.

5.1 Disciplined by the Platform: Why Disposition and Structure Converge

The strength of disposition and structure is not coincidental. It reflects what Bovens and Zouridis (2002) describe as the transition toward system-level bureaucracy. When the sequence of procurement stages, access rights, and deadlines is coded into SPSE, many decisions that once required officials' judgement, and

therefore invited informal negotiation, are removed from the frontline. Informants' descriptions of "simply following the available flow" (I4) and working under deadlines "set in the system" (I5) are precisely the curtailment of routine discretion that Busch and Henriksen (2018) identify in their review of digital discretion. In Edwards' (1980) terms, the platform has become the SOP. Structural fragmentation declines because roles are allocated by the system rather than negotiated among units.

This mechanism also helps explain why disposition is so uniformly positive. Officials do not merely comply with the platform. They value it because it protects them. The observation that e-procurement reduces direct interaction with bidders and increases objectivity (I3) mirrors the finding of Neupane *et al.*, (2014) that perceived anti-corruption benefits drive willingness to adopt e-procurement. In diffusion terms, the relative advantage of the system is highly observable to its users (Rogers, 2003). Once the platform encodes the rules, compliance becomes the easiest and safest course of action, so disposition and structure reinforce each other.

Matland's (1995) ambiguity–conflict model predicts exactly this configuration. E-procurement in

West Kutai is a case of administrative implementation. The goals are specified in national regulation and embedded in a national platform, so ambiguity is low, and no informant reported resistance, so conflict is low as well. Under these conditions, Matland argues, outcomes are determined principally by resources. The West Kutai data bear out this prediction. Once communication, disposition, and structure were secured, the only variable that generated recurrent problems was resources.

5.2 Exposed by the Network: Owned Versus Borrowed Capacity

The resource variable itself, however, splits in two. Human resources, which include certified staff, continuous training, and experienced Selection Working Groups, are strong because the UPPBJ can invest in them directly. Facilities in the narrow sense of computers and devices are also adequate. The recurrent problems arise in connectivity, server availability, and national data-centre continuity. Edwards (1980) treats facilities as resources that an implementing agency possesses or lacks, but in digital procurement the most critical facilities are not possessed by the implementer at all. They are provided by telecommunications operators, by LPSE, by LKPP's national systems, and ultimately by the

national data infrastructure whose 2024 failure is recorded in Table 7.

We therefore propose distinguishing between *owned capacity*, meaning the resources that the implementing organisation controls and can build through its own decisions, and *borrowed capacity*, meaning the resources on which implementation depends but which are supplied and governed by others (Table 8). This distinction extends Edwards' framework rather than replacing it. It also connects the model to Pressman and Wildavsky's (1973) insight that implementation becomes fragile as the number of clearance points multiplies. In e-procurement, several of those clearance points are technical rather than organisational, namely the local network, the LPSE server, the national platform, and the data centre. Heeks's (2003) design–reality gap describes the same phenomenon from the perspective of information systems. SPSE is designed on the assumption of continuous connectivity, and in the interior of Kalimantan that assumption does not always hold. Fountain's (2001) observation that technology is always enacted through existing institutions applies here to physical as well as institutional conditions, since the same national platform is enacted differently where the network is thin.

Table 8: Owned and Borrowed Capacity in E-Procurement Implementation

Dimension	Owned capacity (controlled by UPPBJ)	Borrowed capacity (supplied by others)
Human resources	Certified personnel, training, technical guidance, internal mentoring (strong)	Suppliers' digital proficiency and upload behaviour (uneven)
Facilities	Computers, devices, office equipment (adequate)	Internet backbone and fibre links; LPSE servers; national data centre (fragile)
Information	Internal dissemination of regulatory updates (strong)	Timing and frequency of national application updates and regulatory changes (exogenous)
Problem resolution	Internal coordination and assistance to agencies (responsive)	Technical recovery by LPSE, LKPP, and network operators (outside UPPBJ control)

Source: Authors' analysis of interview and documentary data, 2026.

The distinction matters for explanation and for policy. Explanatorily, it clarifies why a unit can score well on every conventional indicator of implementation capacity and still experience recurrent delays. Practically, it shows that the remedies most frequently proposed, namely more training and more commitment, target owned capacity that is already strong. Additional investment there will yield diminishing returns unless borrowed capacity is also secured through redundancy and inter-organisational agreements.

5.3 The Deadline as a Fault Line

The tension between discipline and fragility becomes most visible at a single point in the procurement cycle, the system-enforced submission deadline. The time lock that informants praised as a source of discipline (I5) is the same feature that turns a transient network failure into a potential exclusion. When suppliers upload bids close to the deadline and the network fails, the result is not merely a delay but a failed submission (I6). An isolated inconvenience is thereby converted into a

question of fairness and competition. The coping strategy reported by the Selection Working Group, urging suppliers not to wait for the final hour (I6), shifts the burden of infrastructural risk onto suppliers, many of whom are local firms operating under the same connectivity conditions.

This observation connects with Vaidya *et al.*'s (2006) identification of supplier adoption as a critical success factor. E-procurement has two user communities, and the UPPBJ's authority extends only to one of them. It also qualifies the optimism of domestic studies that treat e-procurement as a straightforward driver of transparency and efficiency (Mu'ah *et al.*, 2024; Setiawan *et al.*, 2024). Transparency is indeed strengthened, but equal access to the transparent process presupposes equal access to the network. Lewis-Faupel *et al.*, (2016) found that e-procurement in Indonesia increased the share of contracts won by non-local firms. That result, desirable from the standpoint of competition, raises the possibility that in poorly connected regions,

local suppliers facing unreliable connectivity may bear a disproportionate share of submission risk. The present data cannot establish whether this occurs in West Kutai, but they identify the mechanism through which it could.

5.4 Alignment with Presidential Regulation No. 46 of 2025

Measured against the core requirements of Presidential Regulation No. 46 of 2025, implementation in West Kutai is well aligned. All procurement stages are conducted electronically through SPSE, the e-catalogue, and related applications. Selection Working Group members are certified. Electronic documentation supports monitoring and audit in line with the regulation's emphasis on accountability (Republic of Indonesia, 2025). These findings are consistent with the principles of transparency and accountability codified in Law No. 25 of 2009 and with the OECD's (2019) view of digital procurement as a foundation of procurement integrity.

The alignment is nonetheless selective. The 2025 regulation also pursues developmental objectives, particularly domestic-product preferences and MSME participation, which were already emphasised in Presidential Regulation No. 12 of 2021 and Law No. 11 of 2020. Throughout the interviews, however, informants framed e-procurement almost entirely in administrative terms, such as efficiency, orderliness, transparency, and audit readiness. None of them discussed the regulation's industrial or MSME objectives. This absence does not demonstrate that these objectives are neglected in practice, but it suggests that, at the implementing unit, the regulation is enacted primarily as an administrative reform rather than as an instrument of economic policy. Thai (2001) has argued that public procurement always serves multiple and potentially competing goals. In West Kutai, the administrative goals appear to dominate how implementers understand the policy.

5.5 Comparison with Previous Studies

The findings corroborate earlier Indonesian research while refining it. Consistent with Septiawan (2018), technological, organisational, and user factors all shape e-procurement success, but the West Kutai case shows that these factors do not carry equal weight. Once organisational factors are secured, technological infrastructure becomes the binding constraint. Consistent with Qomaruddin (2021), communication and implementer motivation proved important, and in West Kutai they were not the source of the remaining problems. The link between system use and staff efficiency reported by Assa Veronica (2023) is echoed in informants' accounts of faster administration and reduced paperwork, and the argument of Khairina (2022) that e-government minimises opportunities for collusion arising from direct contact is supported by the Selection Working Group's emphasis on reduced interaction with bidders. Sofyani *et al.*, (2020) demonstrated that IT

governance mediates the effect of local government initiatives on accountability and transparency. The present study suggests that, in remote regions, such IT governance must extend beyond the organisation to include the management of inter-organisational and infrastructural dependencies. Finally, whereas Aprilla *et al.*, (2024) identified bureaucratic culture as an obstacle to digital transparency, no such cultural resistance was observed in West Kutai. The obstacles there were infrastructural rather than attitudinal.

6. CONCLUSION

This study examined the implementation of procurement digitalisation through e-procurement at the UPPBJ of West Kutai Regency under Presidential Regulation No. 46 of 2025. Assessed through Edwards III's model, implementation is proceeding well. Communication is continuous, multi-channel, and responsive. Human resources are certified and regularly trained. Officials are strongly committed to the system, and bureaucratic structure has been effectively absorbed into the platform's workflow and deadlines. Implementation is also broadly aligned with the regulation's requirements for end-to-end electronic procedures, certified personnel, and accountable documentation.

The central finding, however, concerns the location of the remaining weaknesses. Every recurrent obstacle, including unstable connectivity, server problems, national data-centre disruption, and suppliers' uneven digital readiness, lies in capacity that the UPPBJ does not own. The platform disciplines the bureaucracy from within while exposing it to infrastructural fragility from outside, and this tension is sharpest at system-enforced submission deadlines, where a transient network failure can become an exclusion. Theoretically, the study proposes that Edwards' resource variable be disaggregated into owned and borrowed capacity, and it shows that Matland's model correctly predicts resources to be decisive in administrative implementation of this kind.

Several practical implications follow. The regency government should invest in connectivity redundancy for procurement operations, including backup links independent of a single fibre route. LKPP and LPSE should establish clear and publicly known protocols for extending deadlines when documented network or server failures occur, so that infrastructural risk is not borne by bidders. LPSE should provide a responsive helpdesk and publish maintenance schedules well in advance. The UPPBJ should complement staff training with supplier clinics focused on submission procedures and early uploading, and it should develop practices that give substance to the regulation's MSME and domestic-product objectives.

The study has limitations. All informants were implementers within the UPPBJ, so the accounts may

reflect a favourable self-assessment, and the perspectives of suppliers, regional agencies, LPSE technicians, and auditors were not captured. The analysis relied on qualitative accounts rather than on performance data such as tender duration, failed submissions, or participation rates. Future research could incorporate supplier interviews, analyse SPSE transaction logs to measure the incidence of failed or last-minute submissions, compare connected and remote regencies, and use mixed methods to test whether infrastructural fragility systematically disadvantages local firms.

REFERENCES

- Aprilla, W., Wulandari, M., & Elcaputera, A. (2024). Meningkatkan transparansi dan akuntabilitas pemerintah melalui teknologi digital dan partisipasi publik dalam upaya pemberantasan korupsi. *Eksekusi: Jurnal Ilmu Hukum dan Administrasi Negara*, 2(4), 321–334.
- Assa Veronica, I. O. (2023). Pengaruh penggunaan sistem pengadaan secara elektronik terhadap efisiensi kerja pegawai pada Bagian LPSE Biro Pengadaan Barang dan Jasa Sekretariat Daerah Provinsi Sulawesi Utara. *Jurnal Administrasi Publik*, 9(2), 52–62.
- Az-zahra, D. S., Fadhillah, Y., Yuningsih, A., & Purwoko, S. D. (2024). Analisis sistem e-procurement pengadaan barang dan jasa. *Jurnal Kajian dan Penelitian Umum*, 2(1), 53–60.
- Bovens, M., & Zouridis, S. (2002). From street-level to system-level bureaucracies: How information and communication technology is transforming administrative discretion and constitutional control. *Public Administration Review*, 62(2), 174–184. <https://doi.org/10.1111/0033-3352.00168>
- Busch, P. A., & Henriksen, H. Z. (2018). Digital discretion: A systematic literature review of ICT and street-level discretion. *Information Polity*, 23(1), 3–28. <https://doi.org/10.3233/IP-170050>
- Denhardt, R. B., & Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public Administration Review*, 60(6), 549–559. <https://doi.org/10.1111/0033-3352.00117>
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New public management is dead—Long live digital-era governance. *Journal of Public Administration Research and Theory*, 16(3), 467–494. <https://doi.org/10.1093/jopart/mui057>
- Dunn, W. N. (2018). *Public policy analysis: An integrated approach* (6th ed.). Routledge.
- Dye, T. R. (2013). *Understanding public policy* (14th ed.). Pearson.
- Edwards III, G. C. (1980). *Implementing public policy*. Congressional Quarterly Press.
- Fountain, J. E. (2001). *Building the virtual state: Information technology and institutional change*. Brookings Institution Press.
- Grindle, M. S. (Ed.). (1980). *Politics and policy implementation in the Third World*. Princeton University Press.
- Heeks, R. (2003). *Most eGovernment-for-development projects fail: How can risks be reduced?* (iGovernment Working Paper No. 14). Institute for Development Policy and Management, University of Manchester.
- Hill, M., & Hupe, P. (2014). *Implementing public policy: An introduction to the study of operational governance* (3rd ed.). Sage.
- Khairina, E. (2022). Tinjauan terhadap e-procurement di Indonesia. *Dialektika Publik*, 6(1), 15–22.
- Lewis-Faupel, S., Neggers, Y., Olken, B. A., & Pande, R. (2016). Can electronic procurement improve infrastructure provision? Evidence from public works in India and Indonesia. *American Economic Journal: Economic Policy*, 8(3), 258–283. <https://doi.org/10.1257/pol.20140258>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. Russell Sage Foundation.
- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory*, 5(2), 145–174.
- Mazmanian, D. A., & Sabatier, P. A. (1983). *Implementation and public policy*. Scott, Foresman.
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. <https://doi.org/10.1016/j.giq.2019.06.002>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Mu'ah, M., Masram, M., Amalia, W., Sayyid, M., & Mas'adah, M. (2024). Pengaruh implementasi e-procurement terhadap fraud pengadaan barang dan jasa dalam mewujudkan good governance. *Owner: Riset dan Jurnal Akuntansi*, 8(2), 1810–1822.
- Neupane, A., Soar, J., Vaidya, K., & Yong, J. (2014). Willingness to adopt e-procurement to reduce corruption: Results of the PLS path modeling. *Transforming Government: People, Process and Policy*, 8(4), 500–520.
- OECD. (2019). *Reforming public procurement: Progress in implementing the 2015 OECD Recommendation*. OECD Publishing.
- Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Addison-Wesley.
- Pressman, J. L., & Wildavsky, A. (1973). *Implementation: How great expectations in Washington are dashed in Oakland*. University of California Press.
- Qomaruddin. (2021). Implementasi kebijakan

- pengadaan barang dan jasa secara elektronik pada Pemerintah Kota Surabaya. *Publika*, 9(3), 257–266.
- Republic of Indonesia. (1999). *Law No. 47 of 1999 on the establishment of Nunukan, Malinau, West Kutai, East Kutai Regencies and Bontang City*.
 - Republic of Indonesia. (2003). *Presidential Decree No. 80 of 2003 on guidelines for the procurement of government goods/services*.
 - Republic of Indonesia. (2007). *Presidential Regulation No. 106 of 2007 on the National Public Procurement Agency (LKPP)*.
 - Republic of Indonesia. (2009). *Law No. 25 of 2009 on public services*. State Gazette of the Republic of Indonesia Year 2009 No. 112.
 - Republic of Indonesia. (2010). *Presidential Regulation No. 54 of 2010 on government procurement of goods/services*.
 - Republic of Indonesia. (2015). *Presidential Regulation No. 4 of 2015 on the fourth amendment to Presidential Regulation No. 54 of 2010 on government procurement of goods/services*.
 - Republic of Indonesia. (2018). *Presidential Regulation No. 16 of 2018 on government procurement of goods/services*. <https://peraturan.go.id>
 - Republic of Indonesia. (2020). *Law No. 11 of 2020 on job creation*. State Gazette of the Republic of Indonesia Year 2020 No. 245.
 - Republic of Indonesia. (2021). *Presidential Regulation No. 12 of 2021 on the amendment to Presidential Regulation No. 16 of 2018 on government procurement of goods/services*. <https://peraturan.go.id>
 - Republic of Indonesia. (2025). *Presidential Regulation No. 46 of 2025 on the second amendment to Presidential Regulation No. 16 of 2018 on government procurement of goods/services*. <https://peraturan.go.id>
 - Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
 - Sabatier, P. A. (1986). Top-down and bottom-up approaches to implementation research: A critical analysis and suggested synthesis. *Journal of Public Policy*, 6(1), 21–48.
 - Septiawan, B. (2018). Keberhasilan implementasi sistem e-procurement pada pemerintah daerah se-Provinsi Jawa Barat. *Jurnal Kajian Akuntansi*, 2(1), 23–40.
 - Setiawan, D. B., Rokhman, A., & Kurniasih, D. (2024). Peningkatan efisiensi dan transparansi melalui sistem pengadaan barang dan jasa secara elektronik di sektor publik. *Journal of Social and Economics Research*, 6(1), 1613–1623.
 - Sofyani, H., Riyadh, H. A., & Fahlevi, H. (2020). Improving service quality, accountability and transparency of local government: The intervening role of information technology governance. *Cogent Business & Management*, 7(1), 1735690. <https://doi.org/10.1080/23311975.2020.1735690>
 - Thai, K. V. (2001). Public procurement re-examined. *Journal of Public Procurement*, 1(1), 9–50.
 - Vaidya, K., Sajejev, A. S. M., & Callender, G. (2006). Critical factors that influence e-procurement implementation success in the public sector. *Journal of Public Procurement*, 6(1/2), 70–99.
 - Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6(4), 445–488.

Cite This Article: Reni, R., Sukowati, P., & Fristin, Y. (2026). Owned and Borrowed Capacity in Digital Procurement: Evidence from Local Government in Indonesia. *East African Scholars J Econ Bus Manag*, 9(10), 330-342. <https://doi.org/10.36349/easjebm.2026.v09i10.001>