

Evaluation of the Internal Control System Towards Fraud Prevention in the Procurement of Goods and Services: A Case Study of Building Management Apartment a and Mixed-Use Building B

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Abstract. *Problems in the governance of goods and services procurement in commercial properties and vertical residential areas are vulnerable to the risk of fraud if not supported by an adequate internal control system. This study aims to evaluate the effectiveness of the internal control system in preventing potential fraud in the procurement of goods and services and formulate control strategies in the Building Management of Apartment A and Mixed-Use Building B. Using a descriptive qualitative approach, data collection was conducted through in-depth interviews with key informants, observation, and analysis of historical transaction documents. The evaluation was analyzed based on the COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework and the Fraud Triangle theoretical approach. The results of the study indicate that although administrative compliance with transaction documents (such as three-way matching) has been implemented, the effectiveness of internal control is still hampered by the absence of a formal Risk Register, the absence of a Whistleblowing System (WBS), and the long lead time for approval from Purchase Request (PR) to Purchase Order (PO). The slow bureaucratic duration creates an opportunity gap in the form of procedural bypass practices in emergency procurement. The implications of this study require management to digitize procurement through integrated e-procurement, simplify the bureaucratic approval flow, and strengthen the independent oversight function to mitigate the risk of irregularities preventively.*

Keywords: *Building Management; COSO Framework; Fraud; Internal Contro; Procurement of Goods and Services.*

1. Introduction

The mixed-use property management sector (combining residential, commercial, and office spaces) and apartments in Indonesia are experiencing rapid growth in line with the increasing demand for vertical housing in urban areas. Within building management, the procurement function is the lifeblood of daily operations. Procurement in this sector involves the allocation of billions of rupiah in operational funds annually, sourced directly from the Service Charge (SC) and Sinking Fund (SF) of unit owners and building occupants.

The scope of procurement of goods and services in Building Management covers various vital areas, including the provision of outsourcing services such as security, cleaning, garden maintenance, swimming pool maintenance, Sewage Treatment Plant (STP) operation, lift/elevator maintenance services, periodic maintenance of Mechanical, Electrical, and Plumbing (MEP) systems, to repair and renovation work of shared facilities.

Management is based on several strategic aspects, including:

1. **Operational Expenditure (Opex) Efficiency:** Controlling expenditures so that the allocation of Service Charge and Sinking Fund funds is utilized efficiently, transparently, and managed professionally.
2. **Building Asset Reliability:** Ensure the availability of quality spare parts and vendor services to prevent operational disruptions (downtime) in vital building facilities.
3. **Compliance and Safety Risk Mitigation:** Guaranteeing compliance with building functional suitability certification and Occupational Safety and Health (K3) standards for the comfort and safety of residents.
4. **Property Reputation and Commercial Value:** Proper procurement has a direct impact on the level of resident satisfaction and maintains the resale value of the property unit.

Despite its vital role, the procurement function for goods and services within the management of the Association of Apartment Owners and Tenants (PPPSRS) is highly vulnerable to fraud and conflicts of interest. This vulnerability is driven by the high volume of operational financial transactions, weak internal oversight, non-compliance with Standard Operating Procedures (SOPs), and a suboptimal whistleblowing system.

The urgency of enforcing procurement accountability is legally strengthened through the Regulation of the Minister of Housing and Settlement Areas (Permen PKP) No. 4

2025 Law on the Management of Apartments. Based on the principles of governance in this regulation, the management of shared assets, parts, and land must be carried out efficiently, effectively, transparently, and accountably. This regulation requires PPPSRS administrators and building managers to implement an open procurement mechanism to prevent unilateral vendor appointments and misuse. Authority. Plans for the procurement of specialist services and maintenance vendors must be published transparently and accountably to owners/occupants and accounted for in the PPPSRS General Members Meeting (RUA). This regulation also emphasizes the obligation to prepare annual financial reports audited by an Independent Auditor and opens the opportunity for special audits if indications of misappropriation of shared funds are found.

2. Research Methods

This study employed field research with a qualitative descriptive-evaluative approach. The qualitative approach was chosen because the researchers intended to gain a deeper understanding of social phenomena related to real-world conditions without any treatment or manipulation of the variables being studied.

The descriptive-evaluative nature is used to systematically describe the factual facts regarding the implementation of the elements of the internal control system, then evaluate them based on the framework standards of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in an effort to prevent potential fraud in the procurement process of goods and services in Building Management Apartment A and Mixed-Use Building B. Through this approach, control phenomena, fraud risk points, and the effectiveness of risk mitigation are analyzed contextually based on primary and secondary data.

3. Results and Discussion

3.1. Building Management Profile of Apartment A and Mixed-Use Building B

The management of high-rise buildings and mixed-use developments requires professional, transparent, and accountable governance mechanisms. This research focuses on two property management entities in the Banten region:

1. Building Management Apartment A (PPPSRS):

The Association of Apartment Owners and Residents (PPPSRS) in Apartment A is an official legal entity established under Law Number 20 of 2011 concerning Apartments and Government Regulation Number 13 of 2021. This organization is tasked with managing the collective interests of apartment owners and residents, including daily operations,

maintenance of public facilities, collection of Environmental Management Fees (IPL), and the establishment of environmental regulations.

2. Building Management Mixed-Use Building B:

Mixed-Use Building B is a mixed-use development area that integrates residential units (apartments), office space, and retail commercial areas. The building is managed through a collaborative consortium between the Main Developer and the Professional Management Agency (Building Management), integrating a smart management system based on the Internet of Things (IoT) and a Smart Building Management System.

Table presents a comparative mapping of operational functions in the two research objects.

Table: Mapping of Operational Functions of Research Objects

	Association of Owners & Tenants (LegalProfessional Developer / BM Consortium Entity)		
Entity Form			
Property Characteristics	Vertical Housing (Residential)	Mixed-Use (Residential, Commercial Area)	Office,
Service Focus	Resident Comfort, IPL Transparency,IoT Technology Efficiency, Smart Public Facilities		
Main Procurement	Security, Cleaning, MEP MaintenanceIoT Maintenance, Smart Parking, Fit-Out Services	Vendor	

a. Organizational Structure and Procurement Metrics

The implementation of procurement of goods and services in both entities is under the control of the Building Manager who oversees technical and administrative units (such as Engineering, General Services, Tenant Relations, Purchasing, and Store Keeper).

Based on historical procurement operational data, the metrics analysis reveals significant transaction volume and duration characteristics between the two entities, as summarized in Table.

Diagram : Building Management Organizational Hierarchy Flow

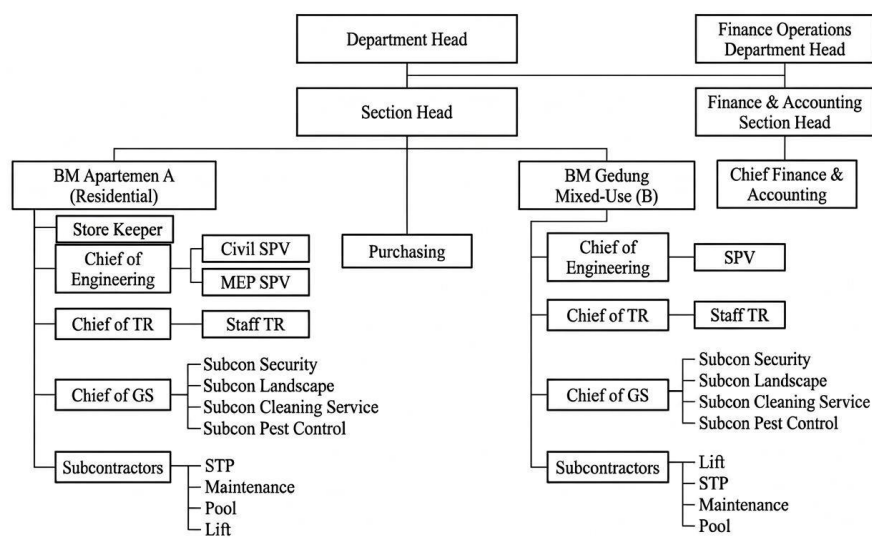


Table: Comparison of Procurement Operational Metrics in 2025

Performance Metrics	Apartment A	Mixed-Use Building B
Total Procurement Transactions	± 60 transactions (275 line items)	± 20 transactions (80 line items)
Procurement Budget Estimate	± Rp. 1.90 billion	± Rp. 920 million
Average Lead Time PR to PO	21.5 days (Median: 20 days)	59.1 days (Median: 28.5 days)
Average Lead Time PO to MoS	13.6 days (Median: 8 days)	23.7 days (Median: 20 days)
Total Average Lead Time (PR to MoS)	35.1 days (Median: 27 days)	83.2 days (Median: 51 days)

Analytical Notes (Approval Bottleneck): Purchase Request (PR) issuance phase becoming a Purchase Order (PO) takes the longest portion of time (reaching 60% up to 70% of the total procurement duration) at both locations. The existence of a long and vulnerable authorization bureaucracy can trigger delays in emergency operations.

3.2. Characteristics of Research Informants

This study collected primary data through in-depth interviews and observations involving key informants selected using purposive sampling techniques. The list of informants is presented in Table.

Table : List of Research Informants (Key Persons)

Code	Title / Position	Work unit	Role in Procurement of Goods & Services
Informant	(Anonymous)		
INF-01	BM	Operational	Executive Responsibility & Final
		Management	Approval
INF-02	PO	Operational	Procurement, Negotiation, & Vendor
		Management	Selection Executor
INF-03	CGS	Operational	Submission of Operational Needs & External
		Management	Services
INF-04	CE	Operational	Technical Specification & Evaluation Compiler
		Management	Work Order
INF-05	CTR	Operational	Submission of Tenant Facility Requirements &
		Management	Complaints

INF-06	SK	Operational	Receipt of Goods, Physical Verification, &
		Management	<i>Inventory taking</i>
INF-07	CF	Operational	Payment Monitoring & Execution
		Management	
INF-08	Representative	Third party	Goods/Service Providers & Contract Partners
	Vendor/Subcontractor	(Provider)	

3.3. Internal Control Analysis Based on the COSO Framework

The evaluation of the internal control system is analyzed using the 5 components of the COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework:

1. **Control Environment:** Management has committed to transparency. However, potential obstacles include Conflicts of interest between field teams and local providers are still found, and staff's understanding of technical regulations needs to be improved.
2. **Risk Assessment:** Fraud risk identification has not been formally documented through the Risk Register. Key risks include unplanned urgent purchasing and direct appointments without adequate comparators.
3. **Control Activities:** The conceptual segregation of duties between applicants, processors, recipients, and payers has been well-designed. However, in technical emergencies, procedural bypasses are still found.
4. **Information and Communication:** Inter-divisional coordination still faces obstacles in the form of sectoral egos, especially differences in perception

between the Technical and Purchasing Divisions regarding product specifications and vendor evaluation criteria.

5. **Monitoring (Monitoring Activities):** Periodic monitoring is not yet supported by an independent Internal Audit function. Current monitoring is still reactive (ad-hoc) when irregularities are discovered in the field.

3.4. Theoretical Discussion and Synthesis

The research results confirm that fraud prevention in the procurement of goods and services in Building Management Apartment A and Mixed-Use Building B is highly dependent on the effectiveness of the implementation of the internal control system.

1. **Relevance to the Fraud Triangle Framework (Opportunity Factor):** Slow bureaucratic approval processes have been shown to increase the opportunity for fraud. When the processing time from a PR to a PO takes a long time (an average of 21 to 59 days), operational teams in the field tend to conduct emergency procurement without following standard procedures. This situation opens up opportunities for collusion, budget padding, and petty cash manipulation. This finding aligns with Cressey's Fraud Triangle theory, where opportunities resulting from weak internal controls are the primary trigger for irregularities.
2. **The Importance of Separation of Functions and 3-Way Matching:** Dual physical verification involving Store Keepers and the Engineering division has proven effective in reducing the risk of short delivery. Implementing three-way document matching between PO, BAST, and Invoice is a crucial defense in ensuring the validity of financial expenditures.

3. **Alignment of Modern Property Governance:** Management of mixed-use areas that adopt IoT technology in Mixed-Use Building B requires digital-based internal control transformation (integrated e-procurement).
4. On the other hand, in Apartment A, the demands for transparency in the management of IPL funds from unit owners require strengthening financial accountability to mitigate the risk of disputes and abuse of authority.

4. Conclusion

Based on the results of descriptive qualitative research and the discussion outlined in Chapter IV regarding the evaluation of the internal control system for procurement of goods and services in preventing potential fraud in Building Management Apartment A and Mixed-Use Building B, several conclusions can be drawn as follows:

Evaluation of Internal Control System Based on COSO Framework:

- a) **Control Environment** Management at both entities has demonstrated a commitment to operational transparency. However, dissemination of codes of ethics and technical regulations remains limited until lower operational levels. Potential conflicts of interest and duplication of functions between verifiers and payment processors were also identified due to limited personnel.
- b) **Risk Assessment:** Fraud risk identification in the procurement function has not been formally documented in a structured Risk Register. Ongoing risk evaluations are still reactive (event-driven) when problems arise in the field, rather than preventive.
- c) **Control Activities:** There is a significant bottleneck in the Purchase Request (PR) approval process to become a Purchase Order (PO), which takes the longest time (around 60% to 70% of the total procurement duration). This long lead time condition triggers the practice of bypassing procedures through emergency orders and excessive use of petty cash.
- d) **Information and Communication:** Most transaction recording and reporting is still paper-based or uses separate spreadsheets. This triggers sectoral egos between divisions (technical, procurement, and finance) and has the potential to cause differences in material stock data
- e) **Monitoring** Operational oversight is not yet continuous and is not supported by an independent operational internal audit function. Vendor performance evaluations have

so far only been conducted on an ad-hoc basis without a continuous measurement system.

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