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**Optimizing Government Goods and Services Procurement Performance Through Digital Procurement Transformation: A Conceptual Framework for Public Organizations**

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***Abstract***

This conceptualization paper proposes an integrated framework for optimizing government procurement performance through digital procurement transformation. Drawing on Dynamic Capability Theory and New Public Management (NPM), this framework addresses a gap in the literature, which has largely discussed digital transformation, procurement governance, and organizational performance separately without demonstrating the synergistic relationships between them. This framework positions digital procurement transformation as a key driver for increased transparency, accountability, process efficiency, and information integration within public organizations. Through these mechanisms, organizations are expected to improve the quality of decision-making, the effectiveness of resource use, and overall procurement performance. Expected outcomes include increased procurement efficiency, the quality of public services, value for money, and increased public trust in government resource management. This framework provides conceptualization and practical insights for procurement managers and policymakers, and serves as a foundation for future empirical research.

***Keywords: Digital Procurement Transformation, Procurement, Dynamic Capability Theory, New Public Management, Public Organizations***

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**INTRODUCTION**

Government procurement of goods and services is a strategic function in governance because it plays a direct role in the use of public budgets, the provision of public services, and the achievement of national development goals. The substantial amount of government spending allocated through the procurement process makes this sector a crucial instrument for creating efficiency, transparency, and accountability in state financial management. However, conventional procurement processes still face various challenges, such as complex bureaucracy, implementation delays, limited access to information, low operational efficiency, and the risk of irregularities and corruption, which can hinder the performance of public organizations (Lyra et al., 2022). Therefore, public organizations are required to innovate and transform their procurement governance to improve the effectiveness and quality of public services.

In recent years, digital transformation has become a key agenda for public sector reform in various countries. Digital transformation is not only defined as the application of information technology in administrative processes, but also as fundamental changes in governance, organizational culture, business processes, and data-driven decision-making to create greater public value (Dobrolyubova, 2021). In the context of government procurement, digital transformation is realized through the implementation of electronic procurement systems (e-procurement), procurement data integration, the use of data analytics, business process automation, and the development of more transparent and collaborative procurement services. This development marks a shift from merely digitizing procedures to a comprehensive

transformation of the public procurement cycle that is integrated and performance-oriented (Mavidis & Folinas, 2022; OECD, 2025).

The literature shows that digitalization of public procurement has significant potential to improve operational efficiency, accelerate the procurement process, expand market access for providers, and strengthen transparency and accountability in public budget management (Mavidis & Folinas, 2022; Jiménez et al., 2022). Furthermore, the use of e-procurement systems can reduce opportunities for corruption and collusion by increasing transaction traceability, providing digital audit trails, and strengthening data-driven oversight mechanisms (Lyra et al., 2022). Various studies also show that digital transformation contributes to improved performance in public sector organizations through optimized work processes, faster decision-making, and improved quality of public services (Yusuf et al., 2023).

However, the implementation of digital transformation in government procurement still faces various challenges. A systematic review of e-procurement indicates that the main obstacles stem not only from technological aspects, but also include organizational factors, leadership, human resource competency, resistance to change, and regulatory readiness and the institutional environment (Neupane et al., 2020). This situation indicates that the success of digital procurement transformation cannot be explained solely by technology adoption but requires an approach that integrates technological, organizational, governance, and performance dimensions.

On the other hand, research on digital procurement transformation and public organizational performance remains fragmented. Most studies focus on the technical aspects of e-procurement implementation, transparency, or corruption prevention separately, while studies explaining the conceptual relationship between digital procurement transformation and optimized public organizational performance are relatively limited. This gap highlights the need to develop a conceptual framework that explains the mechanisms by which digital procurement transformation can simultaneously improve efficiency, effectiveness, accountability, and the quality of public services.

In response to this gap, this study proposes a conceptual framework that integrates digital procurement transformation with the performance dimensions of public organizations. This framework positions digital transformation as a strategic factor driving increased procurement process efficiency, transparency, accountability, decision-making quality, and the creation of public value. Theoretically, this research is expected to enrich the literature on public procurement and public sector digital transformation. Practically, the proposed framework can serve as a reference for policymakers, procurement managers, and public organization leaders in designing procurement digitalization strategies oriented towards improving organizational performance and good governance.

## **RESEARCH METHODS**

This study uses a qualitative approach with a conceptual research method. It aims to develop a framework for optimizing government procurement performance through digital procurement transformation in public organizations. This approach was chosen because the research focuses on concept development, theory synthesis, and the identification of relationships between variables based on existing literature, rather than empirical hypothesis testing. The research design is descriptive-analytical, systematically examining various concepts

related to digital transformation, public procurement, organizational dynamic capability, transparency, accountability, process efficiency, information integration, and government procurement performance. This conceptual approach allows researchers to build a theoretical model that can explain the mechanisms for improving procurement performance through the use of digital technology in public organizations (Jaakkola, 2020).

The primary theoretical foundation of this study is Dynamic Capability Theory, which explains an organization's ability to identify opportunities, utilize resources, and undertake sustainable organizational transformation to address environmental changes. Furthermore, this study utilizes the New Public Management (NPM) perspective as the context for public sector reform, emphasizing efficiency, effectiveness, results orientation, and improving the quality of public services. These two perspectives are used to analyze how digital procurement transformation can lead to increased transparency, accountability, process efficiency, and information integration, ultimately contributing to improved government procurement performance.

The data used in this study is secondary data obtained through a literature review. Data sources include reputable, indexed national and international journal articles, international organization reports, government policy documents, regulations related to government procurement, and scientific publications discussing digital transformation in the public sector. The literature used was prioritized from publications published between 2019 and 2025 to ensure relevance to the latest developments in digital transformation and public procurement governance. Sources were selected selectively based on topic relevance, source credibility, academic quality, and their contribution to the development of the research's conceptual framework.

Data analysis was conducted using content analysis and conceptual synthesis methods. The analysis began with identifying key concepts emerging in the literature, such as digital procurement transformation, organizational dynamic capabilities, transparency, accountability, process efficiency, information integration, and procurement performance. Next, various empirical and conceptual findings were compared to identify relationships between variables and identify consistent patterns of interrelationships across various public organization contexts. This process aims to build a comprehensive understanding of the mechanisms explaining how digital transformation can improve government procurement performance.

The next stage was a literature synthesis to identify research gaps and formulate an integrated conceptual model. The synthesis was conducted by linking Dynamic Capability Theory, the concept of digital procurement transformation, and public governance principles including transparency, accountability, process efficiency, and information integration. The results of this synthesis were used to formulate logical relationships between constructs within a conceptual framework that explains the process of improving government procurement performance through digital transformation.

To enhance conceptual validity, this study employed literature source triangulation by comparing various theoretical perspectives and research findings from various public organization contexts. Furthermore, the study utilized references from reputable scientific journals and publications from international institutions with authority in the field of digital transformation and public procurement. With this approach, the resulting conceptual framework is expected to have a strong theoretical foundation and high practical relevance.

The output of this research is a conceptual framework that explains the relationship between organizational dynamic capabilities, digital procurement transformation, transparency,

accountability, process efficiency, information integration, and government procurement performance. This framework is expected to contribute to the development of literature on public sector digital transformation and serve as a reference for practitioners

## RESULTS AND DISCUSSION

### Digital Transformation of Procurement

Digital transformation of procurement is a key component of the proposed conceptual framework, serving as a strategic mechanism to improve the effectiveness and efficiency of government procurement management. From the perspective of Dynamic Capability Theory, digital transformation is understood not only as the application of information technology, but as an organization's ability to integrate, build, and reconfigure its resources to respond to increasingly dynamic environmental changes. Through the implementation of systems such as e-procurement, e-catalogs, government marketplaces, and other digital platforms, public organizations can optimize procurement processes, accelerate information flow, and improve the quality of decision-making. Thus, digital transformation is a crucial instrument in supporting the modernization of government procurement governance.

However, the implementation of digital transformation in public procurement is not without challenges. Many government organizations still face obstacles such as limited human resource competency, resistance to change, fragmented information systems, and regulatory complexity. These conditions often lead to technology utilization focusing solely on digitizing administrative procedures without generating significant changes to the quality of procurement governance and performance. As a result, the benefits of digital transformation have not been fully realized. Therefore, successful digital transformation requires organizational readiness encompassing technology, human resources, leadership, and a culture of innovation that supports continuous change.

In the proposed conceptual framework, digital procurement transformation is positioned as the link between an organization's dynamic capabilities and improved procurement governance. Organizations that are able to identify technological opportunities, allocate resources appropriately, and continuously adapt work processes will be more successful in implementing a digital procurement system. This implementation not only results in operational efficiency but also creates a more transparent and accountable procurement environment. With a digital system, all procurement activities can be documented electronically, simplifying monitoring, evaluation, and auditing.

Digital transformation also plays a crucial role in increasing process efficiency and integrating information across organizational units. Digital systems enable the automation of various procurement stages, from requirements planning and supplier selection to contract management and performance evaluation. Furthermore, the resulting data integration enables organizations to obtain real-time information to support faster, more accurate, and evidence-based decision-making. This aligns with the principles of New Public Management, which emphasize the importance of efficiency, effectiveness, and results-oriented management in public sector governance. Therefore, digital transformation not only provides administrative benefits but also contributes to improving the overall quality of management and governance of public organizations.

By placing digital transformation at the core of the procurement modernization process, this conceptual framework assumes that increased transparency, accountability, process efficiency, and information integration will have a direct impact on improving the performance of government procurement of goods and services. This performance is reflected in more effective budget use, accelerated procurement processes, improved quality of public services, and the creation of greater public value. Thus, digital transformation of procurement within the proposed framework serves not only as a technological innovation but also as a strategic instrument that drives governance reform and the sustainable improvement of public organization performance.

### **Procurement Transparency**

Transparency is a fundamental principle in government procurement of goods and services, aiming to ensure open information at all stages of the procurement process. In the context of digital transformation, transparency is not only related to the provision of information to the public, but also encompasses ease of access, timeliness, and completeness of information available to all stakeholders. The use of digital technology through e-procurement systems allows information regarding procurement planning, the supplier selection process, contract implementation, and budget realization to be more widely accessible and well-documented. This supports the creation of more open, fair, and accountable procurement governance.

From the New Public Management (NPM) perspective, transparency is seen as a crucial instrument for improving the efficiency and accountability of the public sector. Government organizations are required to manage public resources openly so that the public can monitor budget utilization and organizational performance. Through transparency, the government can narrow the information gap between procurement administrators and the public, as beneficiaries of public services. This information transparency also encourages healthier competition among goods and service providers because the entire procurement process can be monitored objectively and openly.

Digital transformation has made a significant contribution to increasing procurement transparency. An electronic procurement system allows all procurement activities to be automatically recorded in a digital database that can be traced at any time. Information regarding tender documents, requirement specifications, contract values, and supplier identities can be accessed more easily than with conventional systems that rely on physical documents. In addition to increasing information accessibility, digitalization also reduces the opportunity for data manipulation and irregularities that often arise due to limited oversight in manual systems.

Transparency supported by digital technology also has important implications for increasing public trust. When the public has adequate access to procurement information, trust in government institutions tends to increase because the budget management process can be more clearly monitored. Furthermore, information disclosure allows various parties, including auditors, oversight bodies, the media, and civil society, to evaluate procurement implementation. Thus, transparency serves not only as a mechanism for disclosing information but also as a tool of social control that can strengthen the integrity of public organizations.

In the proposed conceptual framework, transparency is positioned as a governance mechanism that bridges the relationship between digital procurement transformation and the performance of government goods and services procurement. The higher the level of transparency achieved through the use of digital technology, the greater the organization's opportunity to increase efficiency, reduce the risk of corruption, strengthen public trust, and produce higher-quality procurement. Therefore, transparency is a critical factor in determining

the success of digital transformation in creating effective procurement governance that is oriented toward public value.

### **Procurement Accountability**

Accountability is a key principle in the management of government procurement of goods and services, emphasizing the obligation of every public organization to be accountable for the use of resources, the decision-making process, and the results achieved to the public and other stakeholders. In the context of public procurement, accountability ensures that each stage of procurement is carried out in accordance with applicable regulations, efficiency principles, and established development goals. Through strong accountability, the government can demonstrate that public budgets are managed responsibly and provide optimal benefits to the public.

From the New Public Management (NPM) perspective, accountability is not only related to compliance with administrative regulations but also encompasses the achievement of measurable performance and results. Public organizations are required to demonstrate the effectiveness of resource use through clear and transparent performance indicators. Therefore, the government procurement system must be able to provide adequate information regarding the procurement process, outputs, and outcomes so that all stakeholders can conduct objective evaluations. This approach encourages public organizations to be more oriented towards results and public value rather than simply fulfilling administrative procedures.

The digital transformation of procurement provides significant opportunities to strengthen the accountability of public organizations. E-procurement systems and other digital platforms enable all procurement activities to be automatically documented and stored in a traceable database. This digital footprint facilitates auditing, monitoring, and evaluation processes because every decision and transaction has clear and well-documented evidence. Furthermore, digitalization helps reduce the risk of data manipulation, abuse of authority, and corrupt practices that can hinder the achievement of procurement objectives.

Accountability supported by digital technology also improves the quality of internal and external oversight. Auditors, supervisory agencies, and the public can access the information needed to assess the compliance of procurement implementation with regulations and organizational objectives. This creates a more effective control mechanism because potential deviations can be detected more quickly and acted upon appropriately. Thus, accountability serves not only as a means of accountability but also as an organizational learning mechanism that supports continuous improvement in procurement management.

In the proposed conceptual framework, accountability is positioned as a governance mechanism that bridges the link between digital procurement transformation and government procurement performance. The higher the level of accountability created through the use of digital technology, the greater the organization's ability to improve resource management effectiveness, strengthen public trust, and optimally achieve procurement goals. Therefore, accountability is a critical factor supporting the success of digital transformation in improving the quality of governance and performance of public organizations.

### **Process Efficiency and Information Integration**

Process efficiency and information integration are two key benefits expected from implementing digital transformation in government procurement of goods and services. Process efficiency refers to an organization's ability to carry out procurement activities with minimal resource utilization while still producing optimal output. Meanwhile, information integration relates to the system's ability to connect data and information from various work units, thereby supporting more effective coordination, decision-making, and oversight. In a complex public

sector environment, these two aspects are crucial factors in improving the quality of governance and public service.

Digital transformation enables public organizations to automate various procurement stages that were previously performed manually. The use of electronic systems can reduce duplication of work, accelerate administrative processes, and minimize human errors. Furthermore, digitalization also helps accelerate the flow of information between organizational units, allowing for more coordinated procurement planning, implementation, and evaluation. This supports the creation of procurement management that is more responsive to the needs of the organization and the public.

From the perspective of Dynamic Capability Theory, an organization's ability to integrate digital technology into business processes is a form of dynamic capability that is essential for addressing environmental change. Organizations that are able to manage and utilize information effectively will be more adaptable to changing needs, regulations, and technological developments. Good information integration enables organizations to obtain accurate, real-time data that can be used as a basis for strategic planning and decision-making. Thus, process efficiency and information integration not only generate operational benefits but also strengthen the organization's capacity for innovation and sustainable development.

The benefits of process efficiency and information integration are also evident in the improved quality of procurement oversight and control. Integrated data enables organizations to more accurately monitor contract implementation, supplier performance, and budget realization. Furthermore, real-time information facilitates the identification of issues and the adoption of corrective actions before risks escalate into larger problems. An integrated system improves coordination between work units, minimizing the potential for delays and process inconsistencies.

In the proposed conceptual framework, process efficiency and information integration serve as mechanisms explaining how digital transformation can lead to improved procurement performance. Organizations that successfully optimize both aspects will be able to accelerate procurement processes, reduce operational costs, improve decision-making quality, and strengthen oversight of public resource use. Therefore, process efficiency and information integration are important elements in creating a modern, effective procurement system that is oriented towards creating public value.

### **Government Procurement Performance**

Government procurement performance is the level of success of a public organization in implementing the entire procurement process to achieve its stated objectives effectively, efficiently, transparently, and accountably. Procurement performance is measured not only by compliance with applicable regulations and procedures, but also by the organization's ability to obtain quality goods and services on time, according to needs, and to provide optimal benefits to the public. In the public sector context, procurement plays a strategic role because a significant portion of the government budget is allocated through procurement activities to support development and the provision of public services. Therefore, improving procurement performance is a crucial indicator of good governance.

From the New Public Management (NPM) perspective, public organization performance must be results-oriented and create value for the public. This approach emphasizes the importance of efficient resource use, effective goal achievement, service quality, and the organization's ability to deliver tangible benefits to the public. In government procurement, good performance is reflected in the organization's ability to obtain goods and services at competitive

prices, with quality that meets specifications, and through a process that is swift and transparent. Thus, procurement is no longer viewed solely as an administrative activity, but rather as a strategic instrument that contributes to improving the quality of public services and achieving development goals.

Digital transformation of procurement has significantly contributed to improving government procurement performance. The use of e-procurement systems, e-catalogs, and various other digital platforms enables organizations to simplify procurement procedures, accelerate administrative processes, and improve the accuracy and reliability of information. Digitization also helps reduce transaction costs, minimize administrative errors, and improve the quality of oversight across all stages of procurement. Through an integrated system, organizations can manage procurement processes more effectively, thereby achieving procurement objectives with more efficient use of resources.

From the perspective of Dynamic Capability Theory, improved procurement performance is influenced by an organization's ability to identify technological opportunities, utilize available resources, and implement continuous change and adjustments. Public organizations with strong dynamic capabilities are better able to integrate digital technology into the procurement process and optimize the resulting benefits. These capabilities include developing human resource competencies, utilizing data as a basis for decision-making, and establishing an organizational culture that is adaptive to change. Therefore, the success of improving procurement performance is determined not only by the availability of technology, but also by the organization's ability to manage the transformation that occurs.

In the proposed conceptual framework, government procurement performance is the end result of digital transformation implementation, supported by transparency, accountability, process efficiency, and information integration. The more effective the application of digital technology in strengthening procurement governance, the higher the performance an organization can achieve. This performance can be measured through several indicators, such as budget efficiency, accelerated procurement time, improved procurement quality, value for money, stakeholder satisfaction, and improved public service quality. Thus, procurement performance is a key indicator of the success of digital transformation in creating modern, effective, and public value-oriented government procurement.

## CONCLUSION

Based on the literature synthesis and conceptual discussion, it can be concluded that digital procurement transformation plays a crucial role in improving the performance of government procurement of goods and services. Through the application of digital technology, public organizations can increase transparency, accountability, process efficiency, and information integration, ultimately supporting more effective and value-driven procurement management.

This conceptual paper proposes a framework that integrates Dynamic Capability Theory, New Public Management, and digital procurement transformation to explain how an organization's ability to adapt to technological change can improve procurement performance. This framework demonstrates that the success of digital transformation depends not only on technology but also on the organization's ability to manage change and strengthen procurement governance.

Overall, this study confirms that optimizing procurement performance can be achieved through the synergy between organizational capabilities, digital transformation, transparency, accountability, process efficiency, and information integration. The resulting conceptual framework is expected to serve as a reference for public organizations in developing more modern, effective, and sustainable procurement strategies and serve as a basis for future empirical research.

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