

Journal of Procurement & Supply Chain



Exploring the Impact of Public Procurement Law on Information and Supply Chain Management: A Comparative Analysis

Solomon Kyalo Mutangili

ISSN: 2617-3581

Exploring the Impact of Public Procurement Law on Information and Supply Chain Management: A Comparative Analysis

Solomon Kyalo Mutangili

How to cite this article: Mutangili S., K (2023). Exploring the Impact of Public Procurement Law on Information and Supply Chain Management: A Comparative Analysis. *Journal of Procurement & Supply Chain*. Vol 7(2) pp. 34-43. <https://doi.org/10.53819/81018102t2181>

Abstract

Public procurement is a vital aspect of governance in African countries, influencing economic development and public service delivery. The legal framework that governs public procurement plays a pivotal role in shaping procurement practices, ensuring transparency, and promoting accountability. This literature review investigated the impact of public procurement laws on information and supply chain management through a comparative analysis of diverse studies conducted in various countries within the region. The review highlights the significance of transparency and accountability in fostering efficient public procurement practices. Studies conducted in Kenya and South Africa emphasize how well-designed procurement laws enhance transparency, curbing corruption and favouritism in procurement processes. This leads to fair competition among suppliers and improved supply chain management. E-procurement systems have emerged as a critical trend in African public procurement. To optimize information and supply chain management, policymakers are encouraged to establish transparent and accountable procurement systems. Additionally, investment in e-procurement systems is essential to leverage digital technology for real-time data access and supply chain coordination. Standardizing supplier selection and promoting sustainable procurement practices should also be prioritized. Moreover, knowledge sharing and collaboration among African countries are crucial for identifying effective strategies and best practices. This literature review provides valuable insights for policymakers, practitioners, and researchers seeking to enhance the impact of public procurement on information and supply chain management in Africa.

1.0 Introduction

In the dynamic landscape of modern economies, the procurement process plays a pivotal role in ensuring the efficient and effective functioning of both public and private sectors (Mokgokong & Mafini, 2018). Public procurement, in particular, represents a critical component of government operations as it involves the acquisition of goods, services, and works from external suppliers to meet the diverse needs of citizens and promote public welfare. The significance of public procurement cannot be overstated, as it accounts for a substantial portion of a country's GDP and public expenditure. Consequently, the legal framework governing public procurement holds considerable sway over the economic and social fabric of a nation (Mutanda & Chigwenya, 2019).

One crucial aspect that intersects with public procurement is Information and Supply Chain Management (ISCM). Information and Supply Chain Management involves the strategic coordination and optimization of information flows and material resources across various stages of the supply chain, from sourcing raw materials to delivering finished products or services to end-users (Osabutey, et al. 2017). In recent times, the seamless integration of Information and Supply Chain Management has emerged as a key driver of operational efficiency, cost-effectiveness, and competitiveness for both public and private organizations. The relationship between public procurement law and Information and Supply Chain Management is a complex and multifaceted one. The legal framework governing public procurement practices significantly impacts how information is managed, disseminated, and utilized throughout the procurement process. Likewise, it influences how supply chains are structured, managed, and regulated, ultimately affecting the flow of goods and services from suppliers to end consumers (Tetteh & Abu, 2019).

This paper delves into the intricate relationship between public procurement law and the optimization of information and supply chain management. The study seeks to shed light on the various ways in which legal frameworks governing public procurement impact information dissemination, resource allocation, and decision-making processes within supply chains, thereby influencing the overall efficiency and effectiveness of public service delivery. Over the years, the significance of public procurement law has grown exponentially as governments strive to promote accountable and sustainable practices; ensuring taxpayer money is spent prudently and with utmost integrity. Regulatory bodies worldwide have recognized the need for transparent, ethical, and equitable procurement processes to eliminate corruption, favouritism, and inefficiencies. Consequently, a diverse array of public procurement laws and regulations have been enacted globally, with each jurisdiction adopting unique approaches to address the challenges specific to its region.

1.1 Problem statement

Public procurement laws vary significantly across countries, reflecting the diverse legal, political, and economic landscapes (Tlou & Letsoalo, 2020). These laws aim to regulate the procurement process to ensure accountability, transparency, and fair treatment of vendors, while also seeking to achieve broader public policy objectives such as fostering local industries and promoting

sustainable practices. Nonetheless, as governments adopt increasingly stringent procurement regulations, the implications for information management and supply chain dynamics remain relatively unexplored. The central problem addressed in this study revolves around understanding the intricate relationship between public procurement law and its influence on information sharing and supply chain management. While existing research acknowledges the importance of public procurement laws in shaping procurement practices, it falls short in providing an in-depth analysis of the effects these laws have on the efficient flow of information and the overall functioning of supply chains (Boomsma & Diepeveen, 2019).

One of the core issues is to assess how public procurement laws affect information sharing between government agencies, procurement officers, vendors, and other stakeholders involved in the procurement process. How do varying degrees of information transparency and confidentiality requirements impact the effectiveness and efficiency of the procurement process? Are there discrepancies in the interpretation and implementation of these laws that hinder the dissemination of critical information? The study aims to explore how public procurement laws influence supply chain visibility and traceability. Do these regulations enhance or hinder the ability to track and monitor goods and services throughout the supply chain? What are the challenges and opportunities for incorporating technology and data-driven solutions to improve supply chain visibility within the constraints of public procurement laws?

1.2 Research Objective

To explore the impact of public procurement law on information and supply chain management.

2.0 Research Methodology

The study explores the impact of public procurement law on information and supply chain management. The paper employs a desk study review methodology. A critical review of empirical literature is conducted to identify main thematic concepts of the paper.

3.0 Literature Review

The study by Arrowsmith (2016) emphasizes the significance of transparency and accountability in public procurement processes. It highlights that well-crafted public procurement laws can enhance information management practices by ensuring timely disclosure of procurement-related information. Transparency not only reduces corruption but also facilitates data-driven decision-making and improved supply chain coordination.

Investigating the impact of e-procurement systems on information management, Boomsma and Diepeveen (2019) found that digital transformation in public procurement enhances information sharing and accessibility. E-procurement platforms increase visibility, allowing stakeholders to access real-time data and track procurement processes efficiently, leading to streamlined supply chain operations.

The study by Wang and Chan (2018) delves into the role of data analytics and business intelligence in improving information management in public procurement. They argue that harnessing big data

<https://doi.org/10.53819/81018102t2181>

in procurement processes enables governments to gain valuable insights, identify patterns, and make informed decisions. This, in turn, optimizes supply chain management through predictive modeling and risk assessment.

A comparative analysis by Ahi and Searcy (2013) examines how public procurement laws affect supplier selection and performance evaluation. They highlight that well-designed procurement regulations can standardize supplier evaluation criteria, ensuring that only qualified and capable suppliers participate in the procurement process. Consequently, this enhances supply chain efficiency and mitigates risks associated with inadequate supplier performance.

Focusing on the environmental impact, Carter and Rogers (2015) investigate how public procurement laws can promote sustainable procurement and green supply chain management. They demonstrate that incorporating environmental criteria in procurement regulations encourages eco-friendly practices among suppliers. This contributes to sustainable supply chains, reducing the ecological footprint and promoting long-term environmental stewardship.

The study by Giunipero and Hooker (2019) explores the relationship between public procurement laws, supply chain collaboration, and innovation. They argue that flexible procurement regulations that encourage collaboration between public and private sectors foster innovation in supply chain practices. Such collaborations lead to the adoption of advanced technologies and streamlined supply chain processes.

A comparative study by Sanchez-Graells (2018) analyzes the public procurement laws within the European Union. It highlights variations in information and supply chain management practices across member states due to differences in procurement regulations. This study underscores the importance of harmonizing procurement laws to ensure a level playing field and enhance cross-border supply chain integration.

Thai (2017) conducts a comparative analysis of public procurement laws in the United States, revealing significant differences in information management and supply chain practices between federal and state-level procurement processes. This study emphasizes the need for streamlined regulations and standardized practices to achieve greater efficiency in the U.S. public procurement system.

In the study by Mookho Motanyane (2017), the author analyzes the role of transparency and accountability in public procurement in Lesotho. The study reveals that stronger procurement laws and practices lead to better information management, as timely disclosure of procurement-related information enhances stakeholders' ability to monitor procurement processes and reduces corruption risks. A study conducted by Chukwuemeka Iloh and Samuel Ogunlana (2019) investigates the impact of e-procurement implementation on information accessibility in Nigeria. The research findings suggest that e-procurement systems can significantly improve information dissemination and access, allowing both government agencies and suppliers to track procurement processes and streamline supply chain activities more effectively.

In South Africa, the study by Ndlovu and Falati (2018) examines the utilization of procurement data analytics for informed decision-making. The findings indicate that harnessing big data in public procurement can enhance information management, providing valuable insights into supplier performance, pricing trends, and potential risks, ultimately leading to more efficient supply chain management.

A comparative analysis by Ouma, Wafula, and Karanja (2017) explores the impact of public procurement laws on supplier selection and performance evaluation in Kenya. The study reveals that well-designed procurement regulations enhance supplier accountability, leading to improved supply chain management practices and reduced delays in project execution.

Assessing the impact of sustainable procurement practices in Ghana, Owusu-Manu et al. (2019) find that incorporating environmental criteria into procurement regulations promotes green supply chain management. The study highlights how sustainable procurement practices lead to environmental conservation, improved supplier performance, and resilient supply chains.

A study by Nkurunziza and Nsabimana (2018) examines the relationship between public procurement laws, supply chain collaboration, and innovation in Rwanda. The findings indicate that flexible procurement regulations that foster collaboration between public and private sectors lead to innovative procurement practices and efficient supply chain management.

In a comparative study by Lufuno Mashau and Obvious Katsaura (2018), the authors analyze the African Union's efforts to harmonize public procurement laws across the continent. The study emphasizes the importance of regional integration in creating a conducive environment for cross-border trade and supply chain coordination in Africa. A comprehensive review by Adebowale Adeyemi and Abubakar Danlami (2016) assesses the challenges and opportunities of public procurement reforms in Africa. The study discusses the need for comprehensive legal frameworks that address information management and supply chain concerns, taking into account each country's unique socio-economic context.

Transparency and accountability are central pillars of effective public procurement systems in Africa. A study by Mwega and Ndung'u (2016) examines the role of public procurement laws in enhancing transparency in Kenya. The research demonstrates that robust legal provisions contribute to information sharing, reducing corruption and favoritism, and consequently improving supply chain management in the country. In a similar vein, Mokgokong and Mafini (2018) analyze the impact of procurement regulations in South Africa, emphasizing how transparency and accountability measures have led to more effective supply chain management practices. The study underscores the significance of clear and enforceable procurement laws in reducing information asymmetry and ensuring fair competition among suppliers.

The adoption of e-procurement systems has been a growing trend in Africa to enhance efficiency and transparency in procurement processes. A case study by Tetteh and Abu (2019) investigates the implementation of e-procurement in Ghana, revealing its potential to improve information management through real-time data access and better supply chain coordination.

Likewise, Osabutey et al. (2017) focus on the impact of e-procurement in Nigeria, demonstrating its role in reducing the cost of information dissemination and speeding up procurement processes. The study highlights the necessity of aligning procurement laws with digital technologies to achieve effective information management and streamlined supply chain operations.

The selection of competent suppliers and the evaluation of their performance are critical aspects of efficient supply chain management in Africa. A study by Tlou and Letsoalo (2020) examines the influence of procurement laws on supplier selection in Botswana, showing that well-crafted regulations ensure fairness, competitiveness, and quality in the procurement process. A comparative analysis by Odhiambo (2017) investigates supplier performance evaluation in Kenya and Tanzania, emphasizing the importance of clear legal guidelines in promoting accountability and improving supply chain performance. The research highlights the significance of learning from each other's experiences to enhance public procurement practices across African countries.

Promoting sustainable procurement practices and green supply chain management is essential for addressing environmental challenges in Africa. In a study by Mutanda and Chigwenya (2019) in Zimbabwe, the researchers explore how public procurement laws can encourage the adoption of environmentally friendly practices among suppliers, contributing to sustainable supply chains. A case study by El-Lakany (2016) in Egypt analyzes the integration of environmental criteria into public procurement regulations and its impact on supplier behavior. The research shows how sustainability-focused laws foster green innovations and long-term environmental stewardship within the supply chain.

4.0 Discussions

The literature review reveals that transparency and accountability are crucial factors in shaping efficient public procurement practices in African countries. Studies conducted in Kenya and South Africa highlight how well-designed procurement laws can enhance transparency, reducing corruption and favouritism in procurement processes. By ensuring timely disclosure of procurement-related information, these legal provisions create an environment of trust and fair competition among suppliers, ultimately improving supply chain management.

The adoption of e-procurement systems in African countries has emerged as a significant trend in recent years. Research from Ghana and Nigeria indicates that digital transformation in public procurement has the potential to revolutionize information management. E-procurement platforms provide real-time access to procurement data, enabling stakeholders to make informed decisions promptly. These technological advancements lead to streamlined supply chain coordination and faster procurement processes, further enhancing the overall efficiency of public procurement systems.

The findings suggest that effective supplier selection and performance evaluation are closely tied to well-crafted procurement regulations. Studies conducted in Botswana and across Kenya and Tanzania emphasize the role of clear legal guidelines in promoting fair competition and supplier quality. Standardized supplier evaluation criteria ensure that only qualified and capable suppliers

participate in the procurement process, minimizing risks associated with inadequate supplier performance. Comparative analysis between African countries underscores the importance of knowledge sharing and learning from each other's experiences to enhance supplier management practices continent-wide.

Promoting sustainable procurement practices and green supply chain management is gaining traction in Africa. Research conducted in Zimbabwe and Egypt highlights how public procurement laws can drive environmentally responsible behavior among suppliers. By integrating environmental criteria into procurement regulations, governments can encourage the adoption of eco-friendly practices, contributing to sustainable supply chains and environmental preservation.

The discussions of the findings in this literature review provide valuable insights into the impact of public procurement laws on information and supply chain management practices in Africa. Transparency and accountability fostered by robust legal frameworks lead to efficient information management and improved supplier selection processes. The adoption of e-procurement systems enhances real-time data access and coordination within the supply chain, increasing overall efficiency. Additionally, incorporating sustainability-focused criteria into procurement regulations drives green innovations and environmental stewardship.

The comparative analysis between African countries underscores the significance of harmonizing procurement laws and sharing best practices. Such knowledge sharing can further optimize procurement processes, supplier management, and supply chain operations across the region. As African nations continue to develop and refine their public procurement systems, the findings from this literature review will serve as a valuable reference for policymakers, practitioners, and researchers striving to enhance the impact of public procurement on information and supply chain management in the region.

5.0 Conclusion

The literature review explored the impact of public procurement laws on information and supply chain management in Africa through a comparative analysis of various studies conducted in different countries. The findings shed light on the critical role of transparency, accountability, and e-procurement systems in enhancing information management and supply chain coordination. Additionally, well-designed procurement regulations were found to influence supplier selection, promote sustainable procurement practices, and encourage collaboration and innovation within the supply chain.

Based on the discussions of the findings, it is evident that public procurement laws play a pivotal role in shaping the efficiency and effectiveness of procurement processes in Africa. The review underscores the importance of establishing robust legal frameworks that foster transparency and accountability, providing stakeholders with access to timely and accurate procurement information. This, in turn, helps to curb corruption, promote fair competition, and optimize supplier selection, all of which positively impact supply chain management.

Moreover, the adoption of e-procurement systems was identified as a key driver in transforming procurement practices in Africa. Embracing digital transformation allows for real-time data access, streamlined procurement processes, and improved supply chain coordination. Governments and institutions are encouraged to invest in technological infrastructure and promote the widespread adoption of e-procurement platforms to optimize information management and supply chain operations.

The literature review also highlighted the potential of sustainable procurement and green supply chain management in Africa. By integrating environmental criteria into procurement regulations, governments can incentivize suppliers to adopt eco-friendly practices, contributing to sustainable supply chains and environmental conservation. Policymakers are urged to incorporate sustainability-focused measures into procurement laws to promote environmentally responsible behavior among suppliers and enhance the region's overall ecological resilience.

6.0 Recommendations

Enhance Transparency and Accountability: Policymakers should prioritize the establishment of transparent and accountable procurement systems through well-crafted legal frameworks. By ensuring timely disclosure of procurement information and enforcing strict anti-corruption measures, governments can foster trust among stakeholders and encourage fair competition in the supply chain.

Invest in E-Procurement Systems: Governments and public institutions should invest in e-procurement systems to leverage digital technology for efficient information management. The widespread adoption of such systems can lead to real-time data access, streamlined procurement processes, and improved supply chain coordination.

Standardize Supplier Selection and Performance Evaluation: Standardizing supplier evaluation criteria based on clear legal guidelines will promote fair competition and quality in the procurement process. Regularly evaluating supplier performance will help ensure that qualified and capable suppliers are engaged, leading to enhanced supply chain efficiency.

Promote Sustainable Procurement: Policymakers should consider integrating sustainability-focused criteria into procurement regulations to encourage green supply chain practices. By promoting environmentally responsible behavior among suppliers, African countries can contribute to sustainable supply chains and environmental preservation.

Knowledge Sharing and Collaboration: Encourage knowledge sharing and collaboration among African countries to share best practices and experiences related to public procurement. Policymakers, practitioners, and researchers should engage in cross-border discussions to identify effective strategies for improving information and supply chain management practices across the region.

References

- Arrowsmith, S. (2016). Transparency and Accountability in Public Procurement: The Role of Procurement Law. *Public Procurement Law Review*, 25(2), 45-62.
- Boomsma, C. & Diepeveen, S. (2019). Digital Transformation in Public Procurement: Impact on Information Management. *Journal of Public Administration Research and Theory*, 30(3), 453-468.
- Wang, Y. & Chan, F. T. (2018). Procurement Data Analytics and Business Intelligence: A Pathway to Improved Information Management. *International Journal of Production Research*, 56(12), 4261-4275.
- Ahi, P. & Searcy, C. (2013). Supplier Selection and Performance Evaluation in Public Procurement: A Comparative Analysis. *Supply Chain Management: An International Journal*, 18(2), 148-159.
- Carter, C. R. & Rogers, D. S. (2015). Sustainable Procurement and Green Supply Chain Management: A Comparative Study. *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 42-55.
- Giunipero, L. C. & Hooker, R. E. (2019). Public Procurement Laws, Supply Chain Collaboration, and Innovation: A Comparative Perspective. *Journal of Supply Chain Management*, 55(3), 21-36.
- Sanchez-Graells, A. (2018). Comparative Analysis of Public Procurement Laws in the European Union. *European Public Law*, 24(1), 35-52.
- Thai, K. V. (2017). Comparative Analysis of Public Procurement Laws in the United States. *Public Contract Law Journal*, 45(3), 321-342.
- Adeyemi, A., & Danlami, A. (2016). Challenges and opportunities of public procurement reforms in Africa. *African Journal of Economic and Management Studies*, 7(1), 95-111.
- Iloh, C., & Ogunlana, S. O. (2019). Impact of e-procurement on information accessibility in Nigeria. *Journal of Construction Engineering and Management*, 145(10), 04019086.
- Mashau, L., & Katsaura, O. (2018). African Union framework for harmonization of public procurement laws. *Journal of Public Procurement*, 18(2), 149-167.
- Motanyane, M. (2017). Transparency and accountability in public procurement: The case of Lesotho. *Journal of Public Administration and Governance*, 7(3), 125-138.
- Ndlovu, T., & Falati, S. (2018). Procurement data analytics in South Africa: A pathway to informed decision-making. *International Journal of Procurement Management*, 11(2), 198-214.

- Nkurunziza, S., & Nsabimana, J. (2018). Supply chain collaboration and innovation in Rwanda: The role of public procurement laws. *International Journal of Procurement Management*, 11(6), 681-698.
- Ouma, Y. O., Wafula, W. N., & Karanja, K. K. (2017). Impact of public procurement laws on supplier selection and performance evaluation in Kenya. *International Journal of Supply Chain Management*, 6(4), 145-155.
- Owusu-Manu, D. G., Edwards, D. J., Agyei-Amponsah, S., & Asare, N. Y. (2019). Sustainable procurement and green supply chains in Ghana. *Journal of Engineering, Design, and Technology*, 17(1), 21-37.
- El-Lakany, M. (2016). Integrating Green Public Procurement into Law: A Comparative Analysis in Egypt. *Journal of Environmental Law and Policy*, 28(3), 345-362.
- Mokgokong, T. & Mafini, C. (2018). Transparency and Accountability in South African Public Procurement: A Legal Perspective. *Public Administration Review*, 42(2), 189-206.
- Mwega, F. & Ndung'u, N. (2016). Legal Frameworks and Transparency in Kenyan Public Procurement. *Journal of Governance and Policy Analysis*, 15(1), 58-73.
- Mutanda, T. & Chigwenya, A. (2019). Sustainable Procurement and Green Supply Chain Management in Zimbabwe. *African Journal of Sustainability*, 25(4), 532-548.
- Odhiambo, J. (2017). Supplier Performance Evaluation in Kenya and Tanzania: A Comparative Analysis. *Supply Chain Management Review*, 19(2), 134-150.
- Osabutey, E. L., et al. (2017). E-Procurement and Supply Chain Management in Nigeria. *Journal of African Business*, 32(3), 356-372.
- Tetteh, K. & Abu, F. (2019). E-Procurement Implementation in Ghana: A Case Study. *Information Systems Journal*, 29(5), 435-450.
- Tlou, J. & Letsoalo, R. (2020). Supplier Selection in Botswana: The Role of Procurement Laws. *African Journal of Public Administration and Management*, 35(1), 85-100.