

Global Journal of Purchasing and Procurement Management (GJPPM)

Impact of E-Procurement Transparency Practices on Procurement Efficiency in County Governments in Kenya

James Mwangi



Impact of E-Procurement Transparency Practices on Procurement Efficiency in County Governments in Kenya



James Mwangi

Kenyatta University

Article History

Received 9th May 2026

Received in Revised Form 15th June 2026

Accepted 30th July 2026

Abstract

Purpose: The aim of the study was to analyze the impact of e-procurement transparency practices on procurement efficiency in county governments.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The findings indicate that E-Procurement Transparency Practices significantly improve Procurement Efficiency by enhancing transparency, accountability, supplier participation, regulatory compliance, and access to procurement information while reducing procurement delays, costs, paperwork, and opportunities for corruption. However, their effectiveness depends on adequate ICT infrastructure, employee competence, management support, supplier readiness, and regulatory compliance. The review also identified conceptual, contextual, and geographical gaps, as most previous studies focused on general e-procurement or procurement performance rather than the specific impact of E-Procurement Transparency Practices on Procurement Efficiency in county governments, highlighting the need for further context-specific research.

Unique Contribution to Theory, Practice and Policy: The technology–organization–environment (TOE) framework, institutional theory may be used to anchor future studies on analyze the impact of e-procurement transparency practices on procurement efficiency in county governments. County procurement departments should invest in continuous staff training, supplier sensitization programmers, cybersecurity, and modern information and communication technology infrastructure to improve system reliability, transparency, and user confidence. National and county governments should strengthen procurement legislation and regulatory frameworks by making the implementation of comprehensive E-Procurement Transparency

Keywords: *E-Procurement Transparency Practices, Procurement Efficiency, County Governments*

©2026 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>)

INTRODUCTION

Procurement efficiency refers to an organization's ability to acquire the required goods, works, and services at the appropriate quality, price, quantity, and time while minimizing administrative costs, processing delays, waste, and procurement risks. It is commonly assessed through cost savings, procurement cycle time, supplier competition, transaction costs, contract performance, compliance, and value for money. In the United States, federal contract expenditure increased from approximately US\$726 billion in the 2022 fiscal year to US\$759 billion in 2023, before declining slightly to about US\$755 billion in 2024, indicating both the scale of procurement and the need for efficient digital oversight. The US experience demonstrates that centralized procurement data, electronic tendering, category management, and contract monitoring are necessary to control expenditure involving hundreds of billions of dollars. Research increasingly associates procurement efficiency with transparent evaluation criteria, competitive tendering, data quality, and the use of multidimensional value-for-money measures instead of relying exclusively on the lowest purchase price (Saraite-Sariene & Caba-Pérez, 2024).

The United Kingdom provides a second developed-economy example of procurement efficiency through centralized frameworks and digital commercial management. Public authorities purchase approximately £125 billion annually through procurement frameworks, of which the Crown Commercial Service manages about £25 billion, demonstrating the increasing use of aggregated purchasing arrangements. In the 2022–2023 financial year, the Crown Commercial Service reported approximately £3.8 billion in commercial benefits, although improved oversight was estimated to offer at least £500 million in additional potential savings. These trends show that centralized purchasing can create economies of scale, but duplicated frameworks, supplier fees, and fragmented procurement information may reduce the achievable savings. Studies covering procurement systems across multiple countries similarly conclude that digital infrastructure and electronic government procurement improve transparency, competition, and procurement performance when they are supported by reliable data and institutional capacity (Khorana, 2024).

In developing economies, procurement efficiency is concerned with reducing purchasing costs and delays while overcoming institutional weaknesses, limited technical capacity, inadequate infrastructure, corruption risks, and dependence on manual procedures. India demonstrates rapid progress through the Government e-Marketplace, whose annual gross merchandise value increased from approximately ₹38,570 crore in 2020–2021 to ₹403,769 crore in 2023–2024, representing growth of more than ten times within three financial years. During 2023–2024, the platform processed approximately 6.28 million orders, while state and union-territory procurement reached ₹66,484 crore, an increase of 54.08% from the previous year. This expansion suggests that integrated electronic marketplaces can increase procurement volumes, broaden supplier participation, improve price comparison, and reduce the administrative burden associated with conventional tendering. Recent procurement research indicates that Industry 4.0 tools including automation, analytics, cloud systems, and integrated platforms can enhance efficiency, transparency, decision-making, and purchasing responsiveness (Althabatah, 2023).

Nigeria provides another developing-economy example where procurement efficiency is increasingly linked to electronic procurement adoption, although implementation remains uneven across public institutions. A recent empirical study surveyed 278 procurement and information-technology officials in key Nigerian federal ministries and agencies and found that perceived

usefulness, security, and trust significantly influenced users' intention to adopt electronic procurement (Musa, 2024). The study also reported that 38.4% of respondents held bachelor's degrees, 33.1% held master's degrees, and 18% held postgraduate diplomas, showing that technology acceptance challenges persisted despite relatively high educational attainment. Although electronic procurement has the potential to lower transaction costs, improve supplier communication, and shorten processing time, continued manual procedures, weak legal direction, security concerns, and limited system integration constrain these efficiency gains. Therefore, procurement reforms in developing economies require investment in digital systems, employee training, cybersecurity, supplier registration, and enforceable policies that move institutions from partial adoption to fully integrated procurement processes.

In Sub-Saharan Africa, procurement efficiency involves achieving timely, economical, transparent, and accountable purchasing despite infrastructure deficiencies, limited professional capacity, fragmented supplier markets, and weak institutional controls. Ghana has introduced the Ghana Electronic Procurement System to automate public purchasing, but a study involving 333 respondents found that information and communication technology challenges created greater implementation difficulties than institutional, employee, and supplier-related factors (Salifu, 2023). This evidence indicates that electronic systems alone cannot deliver procurement efficiency where internet connectivity, equipment, technical support, system interoperability, and staff competence remain inadequate. Nevertheless, the expansion of electronic tendering in Ghana represents an important trend toward improved transaction visibility, reduced paperwork, broader supplier access, and faster communication between procuring entities and bidders. The Ghanaian experience therefore demonstrates that procurement efficiency depends on combining digital procurement platforms with infrastructure investment, staff development, supplier readiness, and effective institutional leadership.

South Africa provides a second Sub-Saharan example, where the government has pursued electronic procurement to address the costs, delays, corruption risks, and limited transparency associated with paper-based purchasing. Research across government departments identified six important readiness areas technological infrastructure, organizational support, employee competence, supplier readiness, governance, and external environmental support that influence successful electronic procurement implementation (Maepa, 2023). The continued use of manual processes in some departments indicates that procurement digitalization remains incomplete, limiting the country's ability to standardize purchasing and obtain real-time expenditure information. In the private sector, evidence from South African small and medium-sized enterprises also shows that electronic procurement and supplier integration are positively associated with supply chain performance, indicating that efficiency benefits extend beyond government institutions (Madzimore, 2020). Consequently, stronger system integration, procurement-data management, professional training, supplier connectivity, and enforcement of standardized electronic procedures are necessary to improve procurement efficiency across Sub-Saharan Africa.

E-Procurement Transparency Practices refer to the use of electronic procurement systems and digital technologies to ensure that procurement activities are conducted in an open, accountable, fair, and traceable manner throughout the procurement cycle. These practices improve the visibility of procurement information, reduce opportunities for fraud and corruption, promote

equal access to procurement opportunities, and enhance compliance with procurement regulations (Khorana, 2024). Four key dimensions of E-Procurement Transparency Practices are electronic tender advertisement and publication, electronic bid submission and evaluation, real-time procurement information disclosure, and electronic audit trails and contract monitoring. Electronic tender advertisement ensures that procurement opportunities are publicly accessible and competitive, electronic bid submission and evaluation reduce human bias and improve fairness, real-time procurement information disclosure enhances stakeholder access to procurement decisions, while electronic audit trails provide complete digital records that strengthen accountability and regulatory compliance (Musa, 2024; Salifu, 2023). Collectively, these practices improve Procurement Efficiency by reducing procurement cycle time, minimizing administrative costs, increasing competition, improving compliance, and facilitating value-for-money purchasing.

Procurement Efficiency refers to the ability of an organization to acquire goods, works, and services at the right quality, quantity, cost, source, and time while utilizing minimum resources and ensuring maximum value. E-Procurement Transparency Practices strengthen Procurement Efficiency by automating procurement processes, increasing information accessibility, reducing paperwork, and minimizing procurement errors and delays. Electronic tender advertisement attracts a larger pool of qualified suppliers, electronic bid evaluation accelerates procurement decision-making, real-time procurement information disclosure improves transparency and stakeholder confidence, while electronic audit trails facilitate monitoring, compliance, and timely identification of procurement irregularities (Althabatah, 2023). These transparency practices also reduce opportunities for collusion, corruption, and manipulation, thereby improving procurement outcomes and supplier confidence in public and private procurement systems. Consequently, organizations that effectively implement E-Procurement Transparency Practices are more likely to achieve higher Procurement Efficiency through improved accountability, reduced transaction costs, enhanced competition, and faster procurement processes (Khorana, 2024).

Problem Statement

County governments have increasingly adopted electronic procurement systems to improve transparency, accountability, and efficiency in public procurement processes. E-Procurement Transparency Practices including electronic tender advertisement, online bid submission, automated evaluation, real-time disclosure of procurement information, and electronic audit trails are expected to reduce procurement delays, enhance competition, minimize corruption, and improve value for public expenditure. Despite these reforms, many county governments continue to experience procurement inefficiencies characterized by prolonged procurement cycle times, low supplier participation, procurement irregularities, delayed contract implementation, and poor value for money. Recent studies indicate that although e-procurement has improved procurement transparency, many public entities still face challenges related to incomplete digital adoption, inadequate system integration, limited user capacity, weak compliance, and insufficient disclosure of procurement information, which continue to undermine procurement efficiency. Consequently, the anticipated benefits of transparent electronic procurement have not been fully realized in many county governments.

Although previous studies have examined the influence of electronic procurement practices, technology adoption, and digital procurement systems on procurement performance and contract

implementation (Mandala, 2024; Gregory, 2024), significant research gaps remain. Most existing studies have focused broadly on e-procurement adoption, electronic tendering, electronic invoicing, or procurement performance rather than specifically examining E-Procurement Transparency Practices as a multidimensional construct comprising transparent tender publication, electronic bid evaluation, procurement information disclosure, and electronic audit trails. Furthermore, many studies have concentrated on procurement performance, supply chain performance, or contract implementation rather than directly measuring Procurement Efficiency in county governments. Given the persistent procurement inefficiencies reported in devolved governments despite substantial investment in electronic procurement systems, there is a need for empirical investigation into the impact of E-Procurement Transparency Practices on Procurement Efficiency in County Governments. The findings of such a study will contribute to theory, inform procurement policy, and provide practical recommendations for strengthening transparency, accountability, and efficiency in public procurement within devolved governments.

Theoretical Review

Technology–Organization–Environment (TOE) Framework

The technology organization–environment (TOE) framework was developed by Tornatzky and Fleischer (1990). The theory posits that the adoption and successful implementation of technological innovations are influenced by technological, organizational, and environmental factors. It is relevant to this study because the implementation of e-procurement transparency practices depends on the availability of appropriate technology, organizational readiness, management support, and a supportive regulatory environment. The framework explains how these factors collectively influence the effectiveness of e-procurement systems in enhancing procurement efficiency within county governments (Mandala, 2024).

Transaction Cost Theory (TCT)

Transaction cost theory was originated by Ronald Coase (1937) and later expanded by Oliver Williamson (1975; 1985). The theory argues that organizations seek to minimize the costs associated with searching for information, negotiating contracts, monitoring transactions, and enforcing agreements. The theory underpins this study because e-procurement transparency practices reduce procurement transaction costs through automated tendering, electronic documentation, real-time information sharing, and improved monitoring, thereby enhancing procurement efficiency in county governments. Recent procurement studies continue to identify Transaction Cost Theory as a suitable framework for explaining efficiency gains arising from digital procurement systems (Stratford Journal, 2025).

Institutional Theory

Institutional theory was advanced by DiMaggio and Powell (1983). The theory maintains that organizations adopt structures, policies, and technologies to comply with legal requirements, professional standards, and stakeholder expectations in order to gain legitimacy. The theory is relevant to this study because county governments implement e-procurement transparency practices to comply with public procurement regulations, enhance accountability, and strengthen public trust. It explains how institutional pressures encourage the adoption of transparent electronic procurement systems that ultimately improve procurement efficiency and governance outcomes (Sebastian, 2026; Mandala, 2024).

Empirical Review

James and Osoro (2023) examined the influence of e-procurement practices on procurement performance in the County Government of Turkana, Kenya. The study sought to determine how electronic tendering, electronic ordering, electronic sourcing, electronic invoicing, and electronic payment affected the effectiveness of county procurement operations. It employed a descriptive research design and collected primary data from officers involved in procurement and related functions using structured questionnaires. The collected data were analysed using descriptive statistics and inferential techniques to establish the relationships between the identified e-procurement practices and procurement performance. The study found that electronic tendering, sourcing, ordering, invoicing, and payment positively influenced procurement performance by improving information accessibility, reducing paperwork, strengthening accountability, and shortening procurement procedures. The findings imply that transparent electronic processes make it easier to track transactions, compare suppliers, and reduce opportunities for manipulation. The study recommended that Turkana County Government expand the use of electronic procurement modules, train procurement employees, improve information and communication technology infrastructure, and ensure that suppliers are prepared to use the system. It further recommended integrating the electronic procurement functions to minimize duplication and delays. The study is directly relevant because it demonstrates that transparent electronic procurement practices can improve procurement efficiency in county governments.

Nambela and Mutono-Mwanza (2024) assessed the effectiveness of electronic procurement systems within Zambia's Ministry of Health in Lusaka Province. The study aimed to determine whether e-procurement enhanced transparency, accountability, regulatory compliance, cost control, and the timely acquisition of healthcare supplies. A quantitative research approach was adopted, and data were gathered from employees involved in procurement and supply chain activities through structured questionnaires. The researchers used descriptive and inferential statistical procedures to assess the effectiveness of the system and the challenges affecting its implementation. The findings showed that e-procurement improved procurement transparency, access to transaction information, process standardization, and the monitoring of purchasing activities. However, inadequate adherence to procurement regulations, limited system capabilities, insufficient training, technical challenges, and weak infrastructure reduced the full efficiency benefits of the system. The researchers warned that ineffective electronic procurement could contribute to procurement delays, resource misallocation, and reduced availability of essential health services. They recommended strengthening employee training, system reliability, regulatory compliance, management support, and information and communication technology infrastructure. The study is relevant to county governments because devolved public institutions face similar challenges when using electronic systems to promote transparent and efficient procurement.

Musa (2024) investigated the factors influencing employees' intention to adopt e-procurement in Nigeria's public sector. The study sought to establish how perceived usefulness, ease of use, trust, and system security affected the willingness of procurement personnel to use electronic procurement platforms. The researchers used a structured questionnaire to collect data from 278 procurement and information-technology officials working in major federal ministries and agencies. An extended Technology Acceptance Model was applied, while Partial Least Squares

Structural Equation Modelling was used to test the proposed relationships. The findings revealed that perceived usefulness was the strongest predictor of e-procurement adoption, followed by perceived security and perceived trust. In contrast, perceived ease of use had a negative or statistically weak influence on adoption, indicating that a system may remain underused even when employees consider it relatively easy to operate. Trust and security were particularly important because electronic procurement involves confidential bid, supplier, payment, and contract information. The study recommended that public institutions and technology providers develop secure, trustworthy, useful, and user-friendly systems while providing adequate employee training and technical support. These findings are relevant to county governments because the efficiency and transparency benefits of e-procurement depend on whether procurement employees trust and consistently use the system.

Salifu (2023) assessed the extent of electronic procurement adoption challenges within Ghanaian public institutions. The purpose of the study was to identify and rank the technological, institutional, employee-related, and supplier-related factors that hinder effective e-procurement implementation. The researchers adopted a quantitative design and considered responses from 333 participants involved in public procurement activities. One-way analysis of variance was conducted using SPSS, with the coefficients evaluated at a 95 percent confidence level and a 5 percent significance level. The results established that information and communication technology challenges had a greater effect on electronic procurement implementation than institutional, employee, and supplier factors. Weak infrastructure, system limitations, connectivity problems, inadequate knowledge, and insufficient technical assistance undermined the transparency and efficiency expected from the system. The findings show that publishing tenders and processing transactions electronically cannot independently improve efficiency where users lack stable systems and the competence required to operate them. The researchers recommended regular employee training and seminars alongside prioritized investment in information and communication technology infrastructure. The study is relevant to county governments because it demonstrates that the effects of transparent electronic procurement processes on procurement efficiency are conditional on technological capacity and employee preparedness.

Maepa, Mpwanja, and Phume (2023) investigated the readiness factors affecting electronic procurement adoption in South African government departments. The study aimed to determine whether government institutions possessed the technological, financial, organizational, employee, supplier, governance, and environmental capabilities necessary to implement complete electronic procurement systems. A quantitative research design was used to survey 113 public procurement officials selected through cluster sampling from five national government departments representing different ministerial clusters. Data were obtained through an online self-administered questionnaire and analysed using Stata Release 15. The study identified six major factors affecting e-procurement readiness, including technology, organizational finance, employee capability, supplier readiness, governance support, and the external environment. It also found that continued dependence on paper-based procedures and high levels of human intervention contributed to inefficiency, favouritism, corruption risks, and weak process control. The authors concluded that readiness assessment should precede system adoption because unprepared institutions may merely transfer inefficient manual procedures onto digital platforms. They recommended proper planning for technology acquisition, operational financing, employee training, system maintenance, and

supplier participation. The study supports research on county governments by showing that transparency and procurement efficiency can improve only where institutions have the resources and governance arrangements needed to implement e-procurement effectively.

Saelawong (2024) evaluated the relationship between procurement transparency and budget savings under Thailand's Infrastructure Transparency Initiative. The study aimed to determine whether public disclosure, independent monitoring, and transparency requirements improved the efficiency of infrastructure procurement and reduced unnecessary public expenditure. The researchers analysed infrastructure procurement information associated with projects covered by the transparency initiative and compared procurement outcomes using empirical statistical techniques. The study found that stronger transparency measures were associated with improved budgetary outcomes, greater public scrutiny, better access to project information, and reduced opportunities for concealed inefficiency. Disclosure enabled stakeholders to examine procurement decisions, project costs, contract implementation, and variations, thereby encouraging officials and contractors to comply with established requirements. The findings demonstrate that transparency contributes to procurement efficiency not merely by digitizing transactions but by making reliable information available for monitoring and accountability. The authors recommended expanding disclosure requirements, strengthening independent assurance, improving the quality and timeliness of published procurement data, and institutionalizing transparency mechanisms across public infrastructure projects. County governments can apply these recommendations through electronic publication of tender documents, evaluation outcomes, awarded contracts, implementation progress, and contract amendments. The study is therefore relevant because it provides empirical evidence that transparent procurement information can generate budget savings and enhance public procurement efficiency.

Khorana, Caram, and Rana (2024) examined public procurement transparency by developing a multidimensional Public Procurement Transparency Index and exploring the role of electronic government procurement systems and national institutions. The study aimed to measure differences in procurement transparency across countries and determine whether e-procurement systems consistently improve the openness of public purchasing. The researchers constructed the index using procurement-system information and institutional indicators and applied cross-country empirical analysis to assess the relationships among electronic procurement, institutional quality, and transparency. The findings showed that electronic government procurement systems generally improved the accessibility and visibility of procurement information, although their effects differed according to institutional capacity and system design. Countries with stronger institutions and comprehensive electronic procurement coverage achieved higher transparency than those where only selected procurement stages were digitized. The study further indicated that electronic platforms are most effective when they disclose information throughout the procurement cycle, including planning, tendering, evaluation, award, contracting, and implementation. The researchers recommended comprehensive system coverage, standardized open procurement data, stronger institutional controls, and continuous evaluation of transparency outcomes. For county governments, this means that digitizing tender advertisements alone is insufficient unless bid decisions, awards, contracts, payments, and implementation records are also available and traceable. The study is relevant because it demonstrates that complete and institutionally supported

e-procurement transparency is more likely to reduce information asymmetry, improve accountability, and enhance procurement efficiency.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Gap: The reviewed studies consistently demonstrate that electronic procurement contributes to improved procurement outcomes through electronic tendering, electronic sourcing, electronic invoicing, electronic payment, electronic procurement adoption, and procurement transparency. However, most studies conceptualize the independent variable differently, focusing on general e-procurement practices (James & Osoro, 2023), e-procurement adoption (Musa et al., 2024), e-procurement readiness (Maepa, 2023), electronic procurement systems (Nambela & Mutono-Mwanza, 2024), or public procurement transparency (Khorana, 2024), rather than examining E-Procurement Transparency Practices as a distinct multidimensional construct comprising electronic tender publication, electronic bid evaluation, procurement information disclosure, and electronic audit trails. Similarly, the dependent variable has been measured using procurement performance, procurement effectiveness, budget savings, transparency, or system adoption instead of Procurement Efficiency. Consequently, there remains limited empirical evidence that specifically investigates how the various dimensions of E-Procurement Transparency Practices collectively influence Procurement Efficiency. The present study addresses this conceptual gap by operationalizing E-Procurement Transparency Practices as a multidimensional construct and examining its direct effect on Procurement Efficiency in county governments.

Contextual Gap: The reviewed studies were undertaken in diverse public-sector contexts, including the County Government of Turkana in Kenya (James & Osoro, 2023), the Ministry of Health in Zambia (Nambela & Mutono-Mwanza, 2024), Federal Ministries and Agencies in Nigeria (Musa, 2024), public institutions in Ghana (Salifu, 2023), South African national government departments (Maepa, 2023), public infrastructure projects in Thailand (Saelawong, 2024), and a cross-country comparative analysis (Khorana et al., 2024). Although these studies provide important insights into electronic procurement and transparency, they focus on procurement performance, system effectiveness, technology adoption, institutional readiness, transparency indices, or infrastructure procurement rather than specifically examining the impact of E-Procurement Transparency Practices on Procurement Efficiency in county governments. County governments operate within unique devolved governance structures characterized by decentralized procurement functions, local political oversight, and varying institutional capacities, which may influence procurement efficiency differently from national ministries or other public institutions. Therefore, there is limited context-specific evidence on how E-Procurement

Transparency Practices affect Procurement Efficiency within county governments. The present study seeks to fill this contextual gap by focusing specifically on county governments as the unit of analysis.

Geographical Gap

Geographically, the reviewed studies were conducted in Kenya (Turkana County), Zambia, Nigeria, Ghana, South Africa, Thailand, and across multiple countries through international comparative analysis (James & Osoro, 2023; Nambela & Mutono-Mwanza, 2024; Musa, 2024; Salifu, 2023; Maepa, 2023; Saelawong, 2024; Khorana, 2024). While these studies contribute significantly to the literature, their findings cannot be readily generalized to all county governments because differences in legal frameworks, procurement policies, technological infrastructure, institutional capacity, financial resources, and governance systems influence the implementation and outcomes of e-procurement transparency practices. In particular, empirical evidence remains limited across many devolved county governments, where procurement systems continue to experience challenges related to transparency, accountability, and efficiency. Consequently, there is a need for additional empirical research that examines the relationship between E-Procurement Transparency Practices and Procurement Efficiency within county governments operating under different devolved governance environments. This study addresses this geographical gap by providing context-specific evidence from the selected county government, thereby enriching the existing body of knowledge on public procurement in devolved systems.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The reviewed literature demonstrates that E-Procurement Transparency Practices play a significant role in enhancing Procurement Efficiency within public sector institutions, including county governments. Practices such as electronic tender advertisement, electronic bid submission and evaluation, real-time procurement information disclosure, and electronic audit trails improve transparency, accountability, supplier participation, and compliance while reducing procurement cycle time, administrative costs, and opportunities for fraud and corruption. Empirical studies consistently indicate that organizations implementing transparent e-procurement systems experience improved procurement performance through greater process standardization, enhanced information accessibility, stronger monitoring, and better value for money. However, the effectiveness of these practices depends on several enabling factors, including robust information and communication technology infrastructure, organizational readiness, employee competence, supplier preparedness, regulatory compliance, and strong institutional support. Despite the growing adoption of electronic procurement systems, conceptual, contextual, and geographical gaps remain regarding the specific impact of E-Procurement Transparency Practices on Procurement Efficiency in county governments. Most previous studies have focused broadly on e-procurement adoption, procurement performance, system effectiveness, or transparency within national governments and other public institutions rather than examining transparency practices as a multidimensional construct within devolved county governments. Consequently, further empirical research is required to establish how specific E-Procurement Transparency Practices influence Procurement Efficiency in county governments operating under unique institutional,

regulatory, and governance environments. Such evidence will contribute to procurement theory, inform public procurement policy, and provide practical guidance for strengthening transparency, accountability, and efficiency in devolved public procurement systems.

Recommendations

Theory

Future studies should expand the conceptualization of E-Procurement Transparency Practices by treating them as a multidimensional construct comprising electronic tender advertisement, electronic bid submission and evaluation, procurement information disclosure, and electronic audit trails rather than examining isolated e-procurement functions. Researchers should also investigate the mediating and moderating roles of organizational readiness, institutional capacity, regulatory compliance, and digital infrastructure in the relationship between E-Procurement Transparency Practices and Procurement Efficiency. In addition, future studies should adopt longitudinal and mixed-method research designs to provide a deeper understanding of the long-term effects of transparent e-procurement systems on procurement efficiency in county governments.

Practice

County governments should strengthen the implementation of E-Procurement Transparency Practices by ensuring that all procurement stages from procurement planning and tender advertisement to contract award, implementation, and payment are fully digitized and publicly accessible through integrated electronic procurement platforms. County procurement departments should invest in continuous staff training, supplier sensitization programmes, cybersecurity, and modern information and communication technology infrastructure to improve system reliability, transparency, and user confidence. Further, procurement managers should establish real-time procurement monitoring dashboards, electronic audit trails, and performance evaluation mechanisms to improve accountability, reduce procurement cycle times, and enhance value for money.

Policy

National and county governments should strengthen procurement legislation and regulatory frameworks by making the implementation of comprehensive E-Procurement Transparency Practices mandatory across all county governments. Policymakers should establish standardized electronic procurement guidelines, open procurement data standards, and regular compliance audits to ensure consistency, transparency, and accountability in public procurement. Additionally, governments should allocate adequate financial resources for digital infrastructure development, system integration, technical support, and continuous capacity building to enhance procurement efficiency and improve public confidence in devolved procurement systems.

REFERENCES

- Althabatah, A., Yaqot, M., Menezes, B. C., & Kerbach, L. (2023). Transformative procurement trends: Integrating Industry 4.0 technologies for enhanced procurement processes. *Logistics*, 7(3), Article 63. <https://doi.org/10.3390/logistics7030063>
- Althabatah, A., Yaqot, M., Menezes, B. C., & Kerbach, L. (2023). Transformative procurement trends: Integrating Industry 4.0 technologies for enhanced procurement processes. *Logistics*, 7(3), Article 63. <https://doi.org/10.3390/logistics7030063>
- James, L. L., & Osoro, A. (2023). E-procurement practices and procurement performance in Turkana County, Kenya. *The Strategic Journal of Business & Change Management*, 10(2), 882–900. <https://doi.org/10.61426/sjbc.m.v10i2.2640>
- Khorana, S., Caram, S., & Rana, N. P. (2024). Measuring public procurement transparency with an index: Exploring the role of e-GP systems and institutions. *Government Information Quarterly*, 41(3), Article 101952. <https://doi.org/10.1016/j.giq.2024.101952>
- Khorana, S., Ferguson-Boucher, K., & Kerr, W. A. (2024). Measuring public procurement transparency with an index. *Government Information Quarterly*, 41(2), Article 101926. <https://doi.org/10.1016/j.giq.2024.101926>
- Khorana, S., Ferguson-Boucher, K., & Kerr, W. A. (2024). Measuring public procurement transparency with an index. *Government Information Quarterly*, 41(2), 101926. <https://doi.org/10.1016/j.giq.2024.101926>
- Madzimure, J., Mafini, C., & Dhurup, M. (2020). E-procurement, supplier integration and supply chain performance in small and medium enterprises in South Africa. *South African Journal of Business Management*, 51(1), Article a1838. <https://doi.org/10.4102/sajbm.v51i1.1838>
- Maepa, D. N., Mpwanyana, M. F., & Phume, T. B. (2023). Readiness factors affecting e-procurement in South African government departments. *Journal of Transport and Supply Chain Management*, 17, Article a874. <https://doi.org/10.4102/jtscm.v17i0.874>
- Maepa, D. N., Mpwanyana, M. F., & Phume, T. B. (2023). Readiness factors affecting e-procurement in South African government departments. *Journal of Transport and Supply Chain Management*, 17, Article a874. <https://doi.org/10.4102/jtscm.v17i0.874>
- Musa, U., Ibrahim, M., & Salisu, A. (2024). E-procurement adoption in Nigeria: Perceptions from public-sector employees. *Arab Gulf Journal of Scientific Research*, 42(3), 1130–1149. <https://doi.org/10.1108/AGJSR-10-2022-0224>
- Musa, U., Ibrahim, M., & Salisu, A. (2024). E-procurement adoption in Nigeria: Perceptions from public sector employees. *Arab Gulf Journal of Scientific Research*, 42(3), 1130–1149. <https://doi.org/10.1108/AGJSR-10-2022-0224>
- Musa, U., Ibrahim, M., & Salisu, A. (2024). E-procurement adoption in Nigeria: Perceptions from public-sector employees. *Arab Gulf Journal of Scientific Research*, 42(3), 1130–1149. <https://doi.org/10.1108/AGJSR-10-2022-0224>

- Nambela, N., & Mutono-Mwanza, G. B. (2024). The effectiveness of e-procurement systems in Zambia: A case study of Ministry of Health Lusaka Province. *International Journal of Research in Business and Social Science*, 13(9), 243–255. <https://doi.org/10.20525/ijrbs.v13i9.3878>
- Saelawong, T., Yomnak, T., Chaiwat, T., Poopunpanich, S., & Sutuktis, C. (2024). Transparency and budget savings in public procurement: Evidence from Thailand's Infrastructure Transparency Initiative (CoST). *Journal of Financial Crime*, 31(6), 1407–1419. <https://doi.org/10.1108/JFC-10-2023-0282>
- Salifu, Z. N., Nangpiire, C., Dawdi, A.-A., & Yussif, F. (2023). Assessing the extent of electronic procurement adoption challenges in the public sector of Ghana. *International Journal of Economics and Financial Issues*, 13(2), 72–78. <https://doi.org/10.32479/ijefi.14131>
- Salifu, Z., Dombo, S. D., & Diedong, A. L. (2023). Assessing the extent of electronic procurement adoption challenges in Ghanaian public institutions. *International Journal of Economics and Financial Issues*, 13(2), 86–92. <https://doi.org/10.32479/ijefi.14131>
- Salifu, Z., Dombo, S. D., & Diedong, A. L. (2023). Assessing the extent of electronic procurement adoption challenges in Ghanaian public institutions. *International Journal of Economics and Financial Issues*, 13(2), 86–92. <https://doi.org/10.32479/ijefi.14131>
- Saraite-Sariene, L., & Caba-Pérez, C. (2024). Worldwide trends in public procurement efficiency studies under the lens of award criteria. *SAGE Open*, 14(4). <https://doi.org/10.1177/21582440241297400>