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Effect of Electronic Tendering Adoption on Organizational Performance among County Governments in the North Rift Region of Kenya: Moderating Role of Supplier Relationship Management

Muli Ndinda Hellen *, Kimitei Edwin and Toroitich Sally

Department of Management Science, School of Business and Economics, University of Eldoret, Eldoret, Kenya

Abstract

County governments in Kenya continue to lose substantial public funds through tendering-stage weaknesses, yet whether electronic tendering improves organizational performance and under what relational conditions remains untested in the North Rift region. This study examined the effect of electronic tendering adoption on organizational performance among the eight county governments of the North Rift region, Kenya, and the moderating role of supplier relationship management (SRM), drawing on the resource-based view and social exchange theory. A cross-sectional explanatory survey was conducted between June and August 2026 covering all 305 top- and middle-level procurement, finance, and user-department staff through a census; 295 questionnaires were returned and 290 were usable (95.1%). Data were collected using a structured questionnaire on a five-point Likert scale and analysed with descriptive statistics, Pearson correlations, and hierarchical multiple regression in SPSS version 25. Electronic tendering adoption ($\beta = 0.294$, $p < .001$) and supplier relationship management ($\beta = 0.297$, $p < .001$) had positive and significant relationships with organisational performance. Supplier relationship management also positively moderated the relationship between electronic tendering and organisational performance ($\beta = 0.599$, $p < .001$), increasing the explained variance by 10.0% ($\Delta R^2 = 0.100$). These findings demonstrate that effective supplier relationship management strengthens the positive relationship between electronic tendering adoption and organisational performance. The study contributes first regional evidence that supplier relationship management is a boundary condition for digital tendering benefits, implying that counties should pair e-tendering investments with deliberate supplier-relationship building.

Keywords: electronic tendering; supplier relationship management; organizational performance; county governments; moderation; Kenya

Correspondence: *hellenndinda2@gmail.com

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Introduction

Organizational performance in the public sector is increasingly evaluated through multiple dimensions, including service quality, operational efficiency, transparency, accountability, and prudent utilization of public resources (Ndakanwa et al., 2024; Thanh et al., 2021). In Kenya, these expectations are embedded within the Constitution of Kenya (2010), the Public Finance Management Act (2012), and the Public Procurement and Asset Disposal Act (2015), which require public entities to demonstrate value for money, transparency, and integrity in the management of public resources. Within the procurement cycle, the tendering phase is particularly critical because it determines supplier selection, resource allocation, and contract awards. It is also one of the most vulnerable stages to inefficiencies, malpractice, and corruption. Evidence from the Auditor-General's 2024/2025 summary report on county governments revealed unsupported expenditures amounting to Kshs 33.58 billion across 28 county executives and avoidable or wasteful expenditure of Kshs 10.99 billion across 22 county governments, much of which was associated with weaknesses in procurement practices, including irregular tendering processes, restricted competition, and unsupported contract awards (Office of the Auditor-General, 2026). These concerns underscore the need for procurement reforms capable of strengthening governance and organizational performance within county governments.

One of the reforms that has gained prominence globally is electronic tendering. Electronic tendering refers to the use of internet-enabled platforms to advertise tenders, receive bids, evaluate submissions, communicate tender outcomes, and maintain procurement records electronically. The adoption of electronic tendering has been widely associated with enhanced procurement efficiency, transparency, accountability, and organizational effectiveness. For instance, Teo and Lai (2009) found that the extent of e-procurement utilization positively influenced operational and financial performance among firms in Singapore. Similarly, Masudin et al. (2021) reported that e-procurement implementation enhanced organizational performance in Indonesian manufacturing firms, particularly where information quality and top management support were strong. In Portugal, Costa et al. (2013) observed that mandatory public e-procurement improved procurement

processes and organizational efficiency despite implementation challenges. More recently, Mocetti and Frigo (2026) established that digital procurement systems increased transparency in public contract awards and significantly shortened procurement award procedures in Italy.

Comparable findings have been reported by Charnor and Quartey (2024) who found that electronic procurement adoption positively influenced procurement performance among public procurement entities in Ghana, while institutional quality significantly strengthened this relationship. Likewise, Nimako-Boateng (2024) reported that e-procurement adoption improved profitability, competitiveness, and operational efficiency in Ghana's construction sector, partly through procurement cost reductions. However, evidence from Africa also suggests that the performance outcomes of electronic tendering may not always be automatic. Ofoegbu et al. (2025) reported a negative and significant relationship between e-tendering and on-time service delivery among capital market operators in Nigeria, while Tanzubil and Atiga (2026) found that e-tendering had no significant direct effect on procurement performance in Ghanaian public institutions, with its influence occurring indirectly through staff competence. These mixed findings suggest that the effectiveness of electronic tendering depends on organizational and contextual conditions beyond the technology itself.

In Kenya, studies have generally reported positive outcomes associated with electronic procurement adoption. Mohamed (2018) established that e-procurement implementation explained approximately 79% of the variation in county government performance. Sitienei and Osoro (2021) found that e-tendering significantly enhanced preferential procurement performance among county governments, while Obiero and Ngugi (2024) and Abud and Mogaka (2025) reported significant positive effects of electronic tendering on organizational and procurement performance, respectively. Additional evidence from county governments in Nairobi, Kakamega, Migori, and Western Kenya similarly suggests that electronic tendering contributes to improved procurement outcomes, transparency, and operational efficiency (Gathima & Njoroge, 2018; Bulibah & Juma, 2020; Khasandi et al., 2022; Ang'iro & Luhombo, 2023).

Despite this growing body of evidence, two notable gaps remain. First, little empirical attention has been devoted to the North Rift Region of Kenya, comprising Baringo, Elgeyo-Marakwet, Nandi, Samburu, Trans Nzoia, Turkana, Uasin Gishu, and West Pokot counties. These counties face unique procurement challenges related to geographical dispersion, limited supplier networks, infrastructural constraints, and capacity limitations. Consequently, findings from other regions may not necessarily apply to the North Rift context. Second, existing studies have predominantly focused on the direct effects of electronic procurement practices on performance while paying limited attention to the conditions under which these effects are strengthened or weakened. In particular, the role of Supplier Relationship Management (SRM) has received limited empirical consideration despite its importance in fostering trust, communication, information sharing, collaboration, and joint problem solving between procuring entities and suppliers. Supplier relationship management may be especially important in electronic tendering environments. Successful implementation of electronic tendering requires suppliers to register on electronic

platforms, access tender information, prepare compliant electronic bids, and participate actively in digital procurement processes. These activities are more likely to succeed when strong relationships exist between suppliers and procuring entities. Previous studies have demonstrated that effective supplier relationship management contributes to improved organizational performance (Amoako-Gyampah et al., 2019; Murithi et al., 2024), suggesting that it may enhance the effectiveness of electronic tendering systems. However, no known study has examined whether supplier relationship management moderates the relationship between electronic tendering adoption and organizational performance among county governments in the North Rift Region of Kenya.

Therefore, the main purpose of this study was to examine the effect of electronic tendering adoption on organizational performance among county governments in the North Rift Region of Kenya, while investigating the moderating role of supplier relationship management. Specifically, the study sought to determine the effect of electronic tendering adoption on organizational performance, assess the effect of supplier relationship management on organizational performance, and examine whether supplier relationship management moderates the relationship between electronic tendering adoption and organizational performance.

Theoretical Framework

This study was anchored on the Resource-Based View (RBV) and Social Exchange Theory (SET).

Resource-Based View

The Resource-Based View posits that organizational performance differences arise from valuable, rare, inimitable, and non-substitutable organizational resources and capabilities (Barney, 1991; Wernerfelt, 1984). Although electronic tendering platforms are generally available to all county governments in Kenya, competitive and performance advantages are likely to emerge from the extent to which counties effectively deploy and integrate these systems into procurement operations. Such capabilities include the ability to electronically advertise tenders, receive and evaluate bids efficiently, communicate awards promptly, maintain audit trails, and ensure compliance with procurement regulations (Vaidya et al., 2006). Counties possessing superior electronic tendering capabilities are expected to achieve greater transparency, reduced procurement cycle times, enhanced competition, lower transaction costs, and ultimately improved organizational performance. Consequently, RBV provides a useful theoretical explanation for the direct relationship between electronic tendering adoption and organizational performance.

Social Exchange Theory

The study was further guided by Social Exchange Theory (SET), which argues that relationships built on trust, reciprocity, commitment, and mutual benefit generate superior outcomes over time (Blau, 1964). Within procurement environments, electronic tendering extends beyond technological processes and requires active participation and cooperation from suppliers. Suppliers must trust the fairness of electronic systems, share accurate information, comply with tender requirements, and engage constructively throughout procurement processes. Effective supplier relationship management, characterized by trust, communication, collaboration, information sharing, and joint problem

solving, encourages suppliers to reciprocate through greater participation, higher-quality bids, and improved contract performance. Accordingly, Social Exchange Theory predicts that the benefits of electronic tendering are likely to be stronger where supplier relationship management practices are well developed. Thus, supplier relationship management is expected to positively moderate the relationship between electronic tendering adoption and organizational performance.

Together, RBV and SET provide a complementary explanation of the study variables. While RBV explains why electronic tendering capabilities contribute to organizational performance, SET explains how strong supplier relationships enhance the effectiveness of those capabilities in generating superior organizational outcomes.

Empirical Literature Review

Electronic Tendering Adoption and Organizational Performance

Extant literature provides substantial evidence that electronic procurement contributes to improved organizational performance, although the magnitude of the effect varies across contexts. Teo and Lai (2009), using survey data from Singaporean firms, found that greater utilization of e-procurement was associated with enhanced operational and financial performance. Similarly, Masudin et al. (2021) demonstrated that e-procurement implementation improved organizational performance among Indonesian manufacturing firms, particularly when supported by strong information quality and management commitment. In the public sector, Costa et al. (2013) reported that mandatory e-procurement improved procurement processes in Portugal, while Mocetti and Frigo (2026) found that digital procurement systems significantly enhanced transparency and reduced procurement award durations in Italy.

Charnor and Quartey (2024) established that electronic procurement adoption positively influenced procurement performance in Ghana, and Asare-Kyire et al. (2023) found that e-procurement implementation improved organizational performance among SMEs. Furthermore, Nimako-Boateng (2024) observed that e-procurement adoption improved competitiveness and profitability among construction firms in Ghana. However, findings have not been universally consistent. Tanzubil and Atiga (2026) found that e-tendering had no direct influence on procurement performance in Ghanaian public institutions, while Ofoegbu et al. (2025) reported a negative relationship between e-tendering and on-time service delivery in Nigeria. These contrasting results suggest that contextual and organizational factors may shape the effectiveness of electronic tendering adoption.

In Kenya, positive evidence predominates. Mohamed (2018) reported that e-procurement implementation substantially improved county government performance. Sitienei and Osoro (2021) established that e-tendering significantly enhanced preferential procurement performance among county governments. Similarly, Obiero and Ngugi (2024) found that e-tendering improved organizational performance in Kiambu County through reduced procurement costs and improved operational efficiency, while Abud and Mogaka (2025) reported positive effects of electronic tendering on procurement performance in Coast region counties. Further evidence from Uasin Gishu County (Sum & Nyaboga, 2024), Western Kenya (Khasandi et al., 2022), Nairobi County (Gathima & Njoroge, 2018), Migori County (Ang'iro &

Luhombo, 2023), and Kakamega County (Bulibah & Juma, 2020) consistently demonstrates the value of electronic tendering in improving procurement outcomes and organizational performance.

Despite these findings, little evidence exists regarding the North Rift Region, thereby necessitating the current investigation.

H_{01}: Electronic tendering adoption has no statistically significant effect on organizational performance among county governments in the North Rift Region of Kenya.

Supplier Relationship Management and Organizational Performance

Supplier relationship management has attracted increasing scholarly attention due to its role in strengthening organizational performance. Amoako-Gyampah et al. (2019) established that supplier relationship management significantly improves firm performance in developing economies, while Dza et al. (2024) found that effective supplier relationships enhanced operational performance through improved supply-chain resilience. Similarly, Acquah (2025) demonstrated that supplier relationship management positively influenced innovation performance through supply-chain agility, while Adda (2024) identified supplier relationship management as a critical strategic procurement practice associated with organizational success.

In Kenya, empirical evidence similarly supports the importance of supplier relationship management. Mwangi and Muli (2023) found that supplier segmentation, collaboration, information sharing, and supplier development significantly improved organizational performance among manufacturing firms. Magiri and Barasa (2025) reported positive associations between trust, commitment, collaboration, information sharing, and organizational performance among supermarkets. Moreover, Murithi et al. (2024) revealed a strong positive relationship between electronic supplier relationship management and organizational performance among Kenyan state corporations.

These studies collectively suggest that effective supplier relationship management contributes substantially to organizational performance by enhancing communication, coordination, collaboration, trust, and responsiveness across supply chains.

H_{02}: Supplier relationship management has no statistically significant effect on organizational performance among county governments in the North Rift Region of Kenya.

Supplier Relationship Management as a Moderator

Although substantial evidence exists regarding the direct effects of electronic procurement and supplier relationship management on performance, research examining interaction effects remains limited. Charnor and Quartey (2024) found that institutional quality moderated the relationship between electronic procurement adoption and procurement performance in Ghana. Similarly, Kisinga et al. (2024) demonstrated that logistics capabilities moderated the relationship between supplier relationship management and business performance in Tanzania.

In Kenya, Kurgat (2021) found that regulatory policies significantly moderated the relationship between supplier relationship management and organizational performance among state corporations. Otieno and Odero (2023) established that procurement ethics strengthened the relationship between

supplier relationship management and supply-chain performance in county governments. Likewise, Chumba et al. (2022) demonstrated that supplier relationships moderated the relationship between supply-chain planning systems and organizational performance among manufacturing firms.

However, Issah et al. (2024) showed that theoretically relevant moderators do not always produce significant interaction effects, as employee commitment failed to moderate the relationship between supplier relationship management and supply performance. This finding highlights the importance of empirically testing moderation effects rather than assuming their existence.

The literature therefore suggests three important observations. First, electronic tendering generally contributes positively to organizational performance, but the effect varies across institutional contexts. Second, supplier relationship management is consistently associated with improved organizational outcomes. Third, despite growing interest in moderation effects, no known study has examined whether supplier relationship management moderates the relationship between electronic tendering adoption and organizational performance among county governments in the North Rift Region of Kenya.

H_{03}: *Supplier relationship management has no statistically significant moderating effect on the relationship between electronic tendering adoption and organizational performance among county governments in the North Rift Region of Kenya.*

Methodology

A cross-sectional explanatory survey design was adopted, appropriate for estimating the direction and strength of the tendering–performance relationship and testing a statistical interaction at a defined point in time (Creswell & Creswell, 2018; Saunders et al., 2019). Because data were collected once, inference is associational rather than causal.

The study covered the eight county governments of Kenya's North Rift region: Baringo, Elgeyo-Marakwet, Nandi, Samburu, Trans-Nzoia, Turkana, Uasin Gishu, and West Pokot. The unit of analysis was the county government; the units of observation were individual officers. The population comprised all 305 top-level (chief officers, directors, and heads of procurement and finance) and middle-level (procurement officers, accountants, contract officers, and user-department representatives) staff directly engaged in the procurement cycle across the eight counties, as documented in county public service board establishment records for 2025 (County Public Service Boards [CPSBs], 2025.

A census of the entire population was conducted, eliminating sampling error (Mugenda & Mugenda, 2003). Because respondents are nested within only eight counties, multilevel estimation was not feasible; results are reported at the pooled level and clustering is acknowledged as a limitation.

Data were collected between June and August 2026 using a structured questionnaire administered through drop-and-pick and secure online modes by trained research assistants; the questionnaire is provided as Supplementary Material. Electronic tendering was measured with eight items (e.g., cycle-time reduction, transparency, audit trails, fairness, cost savings), supplier relationship management with eight items (trust, long-term commitment, communication, cooperation, long-term orientation, information sharing, joint problem-

solving, and mutual performance evaluation), and organizational performance with seven items (cost reduction, operational efficiency, transparency, timeliness, accountability, service quality, and compliance). Items were adapted from validated county-government instruments and rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) (Taherdoost, 2022).

The instrument was piloted with 30 officers (about 10% of the population) in Kisumu County, which was excluded from the main sample. Content validity was assessed through expert review. Construct validity was assessed through exploratory factor analysis: the Kaiser–Meyer–Olkin measure was .931 and Bartlett's test was significant ($p < .001$); all items loaded above .50 on their intended constructs (electronic tendering loadings .724–.821; SRM .635–.747) (Field, 2018; Hair et al., 2019). (The Bartlett chi-square value reported in the underlying dataset appears mis-transcribed and is being verified; the significance conclusion is unaffected.) Internal-consistency reliability in the main study (n = 290) was excellent: electronic tendering $\alpha = .956$ (8 items), supplier relationship management $\alpha = .941$ (8 items), and organizational performance $\alpha = .948$ (7 items) (Cheung et al., 2024; Cronbach, 1951).

Analyses were run in SPSS version 25. Descriptive statistics and Pearson correlations summarized construct levels and bivariate associations. Hypothesis 1 was tested with a simple linear regression of organizational performance on electronic tendering. Hypothesis 2 and 3 were tested through hierarchical moderated regression following Aiken and West (1991): electronic tendering and supplier relationship management were entered first and their product term (ET × SRM) second, with a significant interaction coefficient and a significant increment in explained variance taken as evidence of moderation. The models were specified as:

Model 1: Direct effect of electronic tendering on organisational performance

$$OP = \beta_0 + \beta_1 ET + \varepsilon$$

Model 2: Direct effects of electronic tendering and supplier relationship management

$$OP = \beta_0 + \beta_1 ET + \beta_2 SRM + \varepsilon$$

Model 3: Moderating effect of supplier relationship management

$$OP = \beta_0 + \beta_1 ET + \beta_2 SRM + \beta_3 (ET \times SRM) + \varepsilon$$

Where:

- OP = Organisational performance
- ET = Electronic tendering adoption
- SRM = Supplier relationship management
- ET × SRM = Interaction term between electronic tendering and supplier relationship management
- β_0 = Regression constant
- β_1, β_2 and β_3 = Regression coefficients
- ε = Error term

Results

Response rate and respondent characteristics

Of the 305 officers targeted, 290 returned usable questionnaires, representing a response rate of 95.1%. As presented in Table 1, males constituted 54.8% of the respondents, while females accounted for 45.2%. Most respondents (74.5%) were aged 33–47 years, and 71.1% held at least a bachelor's degree. Regarding work experience, 46.9% had served for 8–10 years. County representation was relatively balanced, with individual counties contributing between 12.1% and 15.5% of the total responses.

Table 1: Respondent characteristics

Characteristic	Category	n	%
Gender	Male	159	54.8
	Female	131	45.2
Age (years)	18–32	20	6.9
	33–47	216	74.5
	48–62	45	15.5
	63 and above	9	3.1
Highest education	Certificate	10	3.4
	Diploma	74	25.5
	Bachelor's degree	126	43.4
	Master's degree	80	27.7
Experience (years)	Below 2	20	6.9
	2–4	10	3.4
	5–7	84	29.0
	8–10	136	46.9
	Above 10	40	13.8
County	Turkana	45	15.5
	Uasin Gishu / Trans-Nzoia / Baringo (40 each)	120	41.4
	Nandi / Elgeyo-Marakwet / Samburu / West Pokot (35 each)	125	43.1

Construct-level descriptive statistics

Table 2 reports construct-level statistics; item-level tables appear in the Supplementary Material. Respondents reported high electronic tendering adoption (M = 4.39, mean item SD = 0.76): transparency improvements scored highest (M = 4.42, SD = 0.692), followed by minimized human errors, cost savings, and enhanced audit trails (each M = 4.40), while reduced cycle times, fair competition, reduced delays, and supplier access to tender information averaged 4.36–4.39. Supplier relationship management was also rated highly (M = 4.39, mean item SD = 0.74), led by trust in key suppliers (M = 4.42, SD = 0.722) and long-term orientation and information sharing (each M = 4.41), with mutual performance evaluation lowest (M = 4.34, SD = 0.779). Organizational performance averaged 4.25 (mean item SD = 0.85). These high means are consistent with post-IFMIS digitalization in Kenyan counties but may partly reflect self-report and social-desirability tendencies.

Table 2: *Construct-level descriptive statistics and reliability*

Construct	Items	Mean	Mean item SD	Cronbach's α
Electronic tendering	8	4.39	0.76	.956
Supplier relationship management	8	4.39	0.74	.941
Organizational performance	7	4.25	0.85	.948

Pearson Correlation Analysis

The Pearson correlation results revealed a strong, positive, and statistically significant relationship between electronic tendering adoption and organizational performance among county governments in the North Rift Region of Kenya ($r = 0.661$, $p < .001$). This indicates that higher levels of electronic tendering adoption were associated with

improved organizational performance. The findings suggest that counties that extensively utilized electronic tendering reported better performance outcomes compared to those with lower levels of adoption. The positive relationship may be attributed to the ability of electronic tendering systems to enhance transparency, streamline procurement processes, reduce delays, and improve efficiency in tender administration.

Supplier Relationship Management (SRM) was also positively and significantly correlated with organizational performance ($r = 0.661$, $p < .001$), indicating that stronger supplier relationships were associated with better performance outcomes.

Regression Analysis

The multiple regression results presented in Table 3 demonstrated that electronic tendering adoption positively and significantly influenced organizational performance ($B = 0.288$, $\beta = 0.294$, $t = 3.820$, $p < .001$). This finding implies that a unit increase in electronic tendering adoption led to a corresponding improvement in organizational performance while controlling for other e-procurement practices.

The overall regression model was statistically significant ($R = 0.775$, $R^2 = 0.601$, Adjusted $R^2 = 0.595$, $F = 107.306$, $p < .001$), indicating that the study variables jointly explained 60.1% of the variation in organizational performance.

Table 3: Relationship between Electronic Tendering Adoption and Organizational Performance

Variable	B	β	t	p-value
Electronic Tendering	0.288	0.294	3.820	<0.001

The findings indicate that increased adoption of electronic tendering significantly enhanced organizational performance among county governments in the North Rift Region.

Hierarchical Regression Analysis

Model 1: Direct Effect of Electronic Tendering on Organizational Performance.

In the first model, electronic tendering adoption was found to have a positive and statistically significant effect on organizational performance ($\beta = 0.294$, $p < .001$). This result suggests that increased utilization of electronic tendering systems contributes significantly to improved organizational performance.

Model 2: Inclusion of Supplier Relationship Management

When Supplier Relationship Management was incorporated into the model, SRM exhibited a significant positive effect on organizational performance ($\beta = 0.297$, $p < .001$). Electronic tendering remained a significant predictor of organizational performance ($\beta = 0.294$, $p < .001$), indicating that both variables independently contributed to performance enhancement.

Model 3: Moderating Effect of Supplier Relationship Management

The interaction term between electronic tendering and supplier relationship management (ET × SRM) produced a significant increase in the explanatory power of the model. The coefficient of determination increased from $R^2 = 0.602$ to $R^2 = 0.702$,

representing an additional 10.0% of explained variance in organizational performance.

The interaction effect was positive and statistically significant (β = 0.599, p < .001), confirming that supplier relationship management significantly moderates the relationship between electronic tendering adoption and organizational performance.

Table 4: Hierarchical Regression Results for Electronic Tendering and Supplier Relationship Management

Model	Variable	β	p-value	R^2	ΔR^2
Model 1	Electronic Tendering	0.294	<0.001	0.601	-
Model 2	Electronic Tendering	0.294	<0.001	0.602	0.001
	Supplier Relationship Management	0.297	<0.001		
Model 3	Electronic Tendering × SRM	0.599	<0.001	0.702	0.100

The positive interaction coefficient indicates that the beneficial effect of electronic tendering adoption on organizational performance becomes stronger when supplier relationship management practices are highly developed. Counties that combined effective electronic tendering systems with strong supplier relationships experienced higher levels of organizational performance than those relying solely on electronic tendering.

Hypothesis Testing

Regarding hypothesis testing, the results revealed that electronic tendering adoption had a positive and statistically significant effect on organizational performance (β = 0.294, p < .001). Since the p-value was below the 0.05 significance threshold, the null hypothesis (H_{01}), which stated that electronic tendering adoption has no significant effect on organizational performance, was rejected. The findings therefore confirm that electronic tendering adoption significantly improves organizational performance among county governments in the North Rift Region of Kenya.

Similarly, supplier relationship management was found to have a positive and significant effect on organizational performance (β = 0.297, p < .001). Consequently, the null hypothesis (H_{02}), which stated that supplier relationship management has no significant effect on organizational performance, was rejected.

Finally, the interaction between electronic tendering adoption and supplier relationship management was positive and statistically significant (β = 0.599, p < .001). The null hypothesis (H_{03}), which stated that supplier relationship management has no significant moderating effect on the relationship between electronic tendering adoption and organizational performance, was therefore rejected.

Discussion

Electronic Tendering Adoption and Organizational Performance

The study found that electronic tendering adoption has a positive and significant effect on organizational performance among county governments in the North Rift Region of Kenya (β = 0.294, p < .001). The strong positive correlation (r = 0.661, p < .001) further indicates that counties with higher levels of electronic tendering adoption tend to report better organizational performance. The high mean score for

electronic tendering adoption (M = 4.39) suggests that the practice is widely implemented across the participating counties, particularly in enhancing transparency, reducing errors, improving audit trails, and generating cost savings. These findings support the argument that digital procurement systems improve organizational effectiveness by enhancing transparency, reducing procurement delays, and streamlining tender management processes. The results are consistent with global studies by Teo and Lai (2009), Masudin et al. (2021), Costa et al. (2013), and Mocetti and Frigo (2026), all of which reported positive performance outcomes associated with electronic procurement adoption. The findings further corroborate those of Mohamed (2018), Sitienei and Osoro (2021), Obiero and Ngugi (2024), and Abud and Mogaka (2025), who reported that electronic procurement practices, particularly e-tendering, improve efficiency, transparency, and organizational performance in public institutions. However, the findings contrast with Ofoegbu et al. (2025), who found a negative association between e-tendering and service delivery in Nigeria, suggesting that the effectiveness of electronic tendering may depend on contextual and implementation factors.

The findings therefore demonstrate that electronic tendering is an important driver of organizational performance in county governments through improved transparency, efficiency, accountability, and procurement effectiveness.

Supplier Relationship Management and Organizational Performance

The study established that supplier relationship management positively and significantly influences organizational performance (β = 0.297, p < .001). The high adoption level of SRM (M = 4.39), particularly in trust, information sharing, and long-term supplier partnerships, indicates that county governments recognize the strategic importance of collaborative supplier relationships.

The findings suggest that effective supplier relationship management enhances organizational performance through improved communication, coordination, responsiveness, and reliability of supply processes. Strong supplier relationships facilitate information exchange and problem-solving, thereby improving operational efficiency and service delivery.

These results are consistent with Amoako-Gyampah et al. (2019), Dza et al. (2024), Acquah (2025), and Adda (2024), who found positive relationships between supplier relationship management and organizational performance. The findings also agree with Kenyan studies by Kurgat (2021), Mwangi and Muli (2023), Murithi et al. (2024), and Magiri and Barasa (2025), all of which reported that supplier communication, collaboration, information sharing, and trust significantly contribute to organizational performance.

The findings therefore demonstrate that supplier relationship management is a critical organizational capability that enhances performance beyond technological investments alone.

Moderating Role of Supplier Relationship Management

The study further found that supplier relationship management significantly moderates the relationship between electronic tendering adoption and organizational performance (β = 0.599, p < .001). The inclusion of the interaction term increased the explanatory power of the model from R^2 = 0.602 to R^2 = 0.702, indicating that SRM

accounted for an additional 10% of the variation in organizational performance.

The positive interaction effect implies that the performance benefits of electronic tendering are stronger in counties that maintain effective supplier relationships. While electronic tendering independently improves performance, its impact is amplified when accompanied by trust, information sharing, cooperation, and effective communication with suppliers. This finding suggests that technology and supplier relationships operate as complementary resources in improving organizational outcomes.

The results are consistent with Charnor and Quartey (2024), who found that institutional quality strengthens the relationship between e-procurement adoption and performance. The findings also align with Kisinga et al. (2024), Kurgat (2021), Otieno and Odero (2023), and Chumba et al. (2022), all of whom reported significant moderating effects of contextual and relational factors on organizational performance.

Therefore, the study extends existing literature by demonstrating that supplier relationship management not only contributes directly to organizational performance but also enhances the effectiveness of electronic tendering adoption among county governments in the North Rift Region of Kenya.

Conclusion

Electronic tendering adoption significantly enhances county government performance in Kenya's North Rift Region by improving transparency, speed, accountability, cost efficiency, and operational effectiveness. Additionally, strong supplier relationship management built on trust, collaboration, and communication independently boosts organizational outcomes. Crucially, supplier relationship management significantly moderates this dynamic, maximizing the performance gains of digital procurement. Consequently, technology investments must be integrated with robust supplier relationships to achieve superior organizational effectiveness.

Recommendations

Policy Recommendations

County governments should continue strengthening the adoption and utilization of electronic tendering systems to improve procurement transparency, efficiency, and accountability. Policy makers should ensure full integration of electronic tendering processes throughout the procurement cycle to maximize performance gains.

The National Treasury and relevant regulatory agencies should formulate policies that encourage continuous improvement and standardization of electronic procurement systems across county governments. Such policies should emphasize transparency, system interoperability, and user support mechanisms.

Managerial Recommendations

County governments should invest in strengthening supplier relationship management practices by promoting trust, collaboration, information sharing, and long-term partnerships with suppliers. Structured supplier engagement programs, regular supplier forums, and joint performance reviews should be institutionalized.

Procurement managers should ensure that electronic tendering systems are complemented by effective communication channels with suppliers. This will facilitate smoother tender participation, faster resolution of procurement issues, and improved supplier responsiveness.

County governments should provide continuous training to procurement staff and suppliers on electronic tendering processes to improve system utilization, reduce implementation challenges, and maximize procurement efficiency.

Limitations and Future Research

Several limitations qualify the findings. The cross-sectional design precludes causal inference; longitudinal or quasi-experimental designs exploiting phased county roll-outs are needed. All measures are self-reported from a single source, exposing estimates to common-method bias despite procedural remedies.

Future research should test additional boundary conditions such as staff competence, top management support and institutional quality in moderated-mediation designs.

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