

# **EFFECT OF SUPPLIER COLLABORATION ON PROCUREMENT PERFORMANCE OF COUNTY GOVERNMENTS IN THE UPPER EASTERN REGION, KENYA**

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**International Academic Journal of Procurement and Supply Chain Management  
(IAJPSCM) | ISSN 2518-2404**

**Received:** 20<sup>th</sup> August 2026

**Published:** 1<sup>st</sup> September 2026

Full Length Research

**Available Online at:** [https://iajournals.org/articles/iajpscm\\_v3\\_i3\\_43\\_66.pdf](https://iajournals.org/articles/iajpscm_v3_i3_43_66.pdf)

**Citation:** Chemweno, J. J., Mwove, R. M., Sitienei, C. (2026). Effect of supplier collaboration on procurement performance of county governments in the Upper Eastern Region, Kenya. *International Academic Journal of Procurement and Supply Chain Management*, 3(3), 43-66.

## ABSTRACT

County governments in Kenya continue to face persistent procurement inefficiencies despite the enactment of the Public Procurement and Asset Disposal Act (2015), with the Office of the Auditor-General (2024) reporting billions of shillings in procurement irregularities across several devolved units, a pattern corroborated by the Public Procurement Regulatory Authority (2025) in its most recent compliance review. Supplier collaboration, understood as a strategic partnership in which buyers and suppliers share information, jointly plan activities, participate in problem-solving and jointly manage risk, has been advanced as a mechanism for improving procurement outcomes, yet empirical evidence from devolved government contexts in Sub-Saharan Africa remains scarce. This study examined the effect of supplier collaboration on procurement performance of county governments in the Upper Eastern Region of Kenya, comprising Meru, Tharaka Nithi, Embu, Isiolo and Marsabit counties. The study was anchored on the Resource-Based View, the Relational View, Social Exchange Theory and Transaction Cost Economics, and adopted a cross-sectional descriptive research design. A census of 296 respondents comprising procurement officers, heads of supply chain management and strategic suppliers was targeted, yielding 285 usable responses (96.28% response rate). Data were collected using a structured, five-point Likert-scale questionnaire and analysed using descriptive statistics, Pearson correlation

and simple linear regression in SPSS version 29.0. The supplier collaboration construct returned a Cronbach's alpha of 0.710, confirming internal consistency, in line with the threshold recommended by Taber (2022) and Nunnally and Bernstein as updated by Hair et al. (2022). Descriptive results indicated that supplier collaboration was strongly practised (grand mean = 4.27, SD = 0.69), with information sharing rated highest. Correlation analysis revealed a positive, statistically significant association between supplier collaboration and procurement performance ( $r = 0.137$ ,  $p = 0.021$ ), and regression results confirmed that supplier collaboration significantly and positively predicted procurement performance ( $\beta = 0.159$ ,  $t = 2.325$ ,  $p = 0.021$ ), explaining 1.9 percent of the variance ( $R^2 = 0.019$ ,  $F = 5.408$ ,  $p = 0.021$ ). The null hypothesis of no effect was therefore rejected. The study concludes that although modest in explanatory power on its own, supplier collaboration makes a statistically significant contribution to procurement performance in devolved government settings, and recommends that county governments institutionalise structured information-sharing platforms, joint planning forums and collaborative risk-management mechanisms with suppliers to strengthen procurement outcomes.

**Key words:** Supplier Collaboration, Procurement Performance, County Governments, Devolution, Resource-Based View, Relational View, Kenya.

## INTRODUCTION

Procurement has evolved from a transactional back-office function into a strategic driver of organisational competitiveness, with the relationship between buyers and suppliers increasingly recognised as a source of value creation rather than a source of adversarial cost competition. According to Handfield, Sroufe and Walton (2023), digitally enabled procurement functions that collaborate closely with suppliers consistently outperform those that treat suppliers as interchangeable transactional counterparts. As indicated by Dyer et al. (2023), inter-firm collaborative routines and shared knowledge can constitute a source of relational rent that neither party could generate alone, a proposition that recent scholarship has extended to the public sector. Meehan and Bryde (2022) allude that collaborative supplier engagement in public procurement is associated with reduced lead times, improved contract compliance and better value for money, while Patrucco et al. (2022) similarly note that dynamic collaborative capabilities allow public buying organisations to respond more effectively to supply disruptions.

Kembro and Näslund (2021) point out that digitally enabled collaboration platforms, joint forecasting tools and shared risk-management protocols have deepened the scope of buyer-supplier collaboration in both advanced and emerging economies, a trend that Wamalwa and Kiptoo (2024) confirm is gradually taking root in East African public procurement systems, albeit unevenly across institutions. The COVID-19 pandemic sharpened global attention on the value of supplier collaboration. As observed by Ivanov and Dolgui (2021), organisations that had invested in collaborative information-sharing arrangements with suppliers prior to the pandemic were markedly more resilient to the ensuing supply shocks than those relying on arm's-length transactional sourcing.

Sodhi and Tang (2021) similarly argue that joint contingency planning between buyers and suppliers, rather than contractual penalty clauses alone, was the decisive factor separating organisations that maintained continuity of supply from those that did not. These lessons have informed a wave of post-pandemic procurement reform initiatives across public institutions in both developed and developing economies (Kembro & Näslund, 2021; Wamalwa & Kiptoo, 2024). In Africa, public procurement typically accounts for between 15 and 20 percent of national expenditure, making the manner in which governments manage supplier relationships a critical determinant of how effectively public funds translate into public value (Ameyaw, Mensah & Osei-Tutu, 2021; Osei-Kojo & Bratton, 2024). Studies from Ghana and Nigeria demonstrate that where collaborative engagement, joint planning and information sharing with suppliers are embedded within transparent procurement frameworks, measurable improvements occur in project efficiency and cost containment, whereas weak enforcement of procurement regulation tends to erode these benefits regardless of how well collaboration is designed on paper (Ameyaw et al., 2021; Afolabi, 2022; Boateng & Ofori, 2023).

Nkemdilim and Uzoma (2024) further contend that public procurement collaboration in West Africa is frequently undermined less by an absence of goodwill between buyers and suppliers than by fragmented digital infrastructure, a constraint that Osei-Kojo and Bratton (2024) also identify as a persistent bottleneck across the wider Sub-Saharan African region. Regional trade frameworks have raised the stakes for public procurement systems that can collaborate effectively with a diversified supplier base. The African Union (2024) notes that the African Continental Free Trade Area has begun to reshape how public entities source goods and services across borders, while the East African Community (2024) reports that regional harmonisation of procurement standards is gradually easing cross-border supplier collaboration, though implementation still lags in several member states.

Mbeki and Achola (2023) argue that regional integration initiatives of this kind will only translate into improved public procurement outcomes if individual member states first strengthen collaborative capacity at the sub-national level, a claim with direct relevance to Kenya's devolved county governments. Kenya's Public Procurement and Asset Disposal Act (2015) established accountability, transparency and value for money as the guiding principles of public procurement, placing devolved county governments at the centre of translating these principles into practice (Andika, 2022). Bett et al. (2021) observe that county procurement units continue to grapple with opportunistic suppliers, delivery delays and procurement processes poorly integrated with development priorities, while the Public Procurement Regulatory Authority (2025) reports that county-level compliance with statutory procurement timelines remains inconsistent across the forty-seven counties.

Mutinda and Wafula (2024) point out that Kenyan county governments have increasingly experimented with supplier portals and digital procurement platforms intended to formalise information sharing, yet adoption remains concentrated in better-resourced counties, leaving many others reliant on manual, relationship-based collaboration. As indicated by Kariuki (2024), the effectiveness of these digital initiatives is closely tied to the underlying quality of buyer-supplier relationships rather than the technology itself, a view that echoes Kembro and Näslund's (2021) broader argument that collaboration platforms amplify, rather than substitute for, relational trust between transacting parties.

The Upper Eastern Region of Kenya, comprising Meru, Tharaka Nithi, Embu, Isiolo and Marsabit counties, presents a particularly instructive context for examining supplier collaboration. Kiloli et al. (2023) note that the region is predominantly agricultural, spans counties of markedly different resource endowments, from the comparatively well-resourced Meru and Embu to the more constrained Isiolo and Marsabit, and depends heavily on effective procurement to deliver infrastructure, healthcare and other essential services. Hassan and Omwenga (2023) further indicate that county governments in this region continue to report limited collaboration with suppliers, narrowly focused supplier evaluation and weak alignment between procurement strategy and development priorities, constraints that collectively undermine procurement efficiency.

Isaack (2025) adds that the Upper Eastern counties in particular face an underdeveloped supplier market relative to more urbanised counties such as Nairobi and Mombasa, which limits the pool of suppliers available for genuine collaborative engagement and often forces county procurement units into repeat dealings with a narrow set of local suppliers. This structural constraint, as Kiloli et al. (2023) suggest, makes the quality of collaboration with the available supplier base, rather than the breadth of the supplier pool, the more decisive factor shaping procurement outcomes in this specific region. Supplier collaboration is conceptualised in this study as a strategic partnership in which the buyer and the supplier share information, jointly plan procurement and supply activities, involve one another in resolving operational problems, and jointly manage risk in pursuit of mutually beneficial outcomes (Chen & Paulraj, 2021; Kumar & Singh, 2023).

Cao and Zhang (2021) describe this bundle of practices as "collaborative advantage," arguing that it is distinct from mere cooperation in that it requires sustained investment in relational infrastructure rather than one-off coordination. Kwon and Suh (2022) similarly stress that collaboration, properly understood, presumes a degree of trust, reciprocity and continuity in the buyer-supplier relationship, features that the relational view and social exchange theory suggest generate performance benefits over time. While a substantial body of research has examined supplier collaboration in manufacturing, retail and private-sector supply chains, its effect within devolved public procurement systems in Sub-Saharan Africa, and specifically within Kenyan county governments, remains comparatively under-examined. This study addresses that gap by empirically testing the effect of supplier collaboration on procurement performance among county governments in the Upper Eastern Region of Kenya.

### **Statement of the Problem**

Public procurement is the principal mechanism through which Kenyan county governments translate budgetary allocations into infrastructure, goods and services for citizens, yet this mechanism continues to be undermined by persistent irregularities. The Office of the Auditor-General's (2024) report identified procurement violations exceeding KSh 10 billion across several counties, including those in the Upper Eastern Region, citing direct procurement without competitive bidding, weak supplier evaluation, poor contract management and payments processed without supporting delivery documentation. The Public Procurement Regulatory Authority (2025) corroborates this picture, reporting that a significant proportion of county procurement entities across the country failed to meet minimum statutory compliance benchmarks in the 2024/2025 financial year.

Specific counties within the Upper Eastern Region, including Embu and Meru, have been cited by the Office of the Auditor-General (2024) for awarding contracts without competitive tendering and processing payments in the absence of delivery notes, while Isiolo has been flagged by the same report for inadequate procurement oversight. Isaack (2025) adds that these irregularities are compounded in the region by a comparatively thin and underdeveloped supplier market, which increases county governments' dependence on a limited number of suppliers and, in the absence of structured collaboration mechanisms, heightens the risk of both opportunistic behaviour and single-supplier lock-in.

A growing body of empirical literature associates supplier collaboration, through practices such as information sharing, joint planning, joint problem-solving and joint risk management, with improved procurement and supply chain outcomes in manufacturing firms, public enterprises and non-governmental organisations. Zhang and Huo (2021) as well as Rashid and Ali (2023) demonstrate this relationship in Chinese manufacturing and UK public-sector contexts respectively, while Achieng (2025) and Kumar and Singh (2023) extend similar findings to non-governmental and Indian public-enterprise settings. However, most of this evidence originates from private-sector, parastatal or donor-funded settings whose governance structures, incentive systems and accountability mechanisms differ substantially from those of devolved county governments operating under statutory procurement law and direct political oversight, as Mutuku (2021) and Kariuki and Njoroge (2024) both caution.

Within the specific context of the Upper Eastern Region, no known study has empirically established whether, and to what extent, supplier collaboration influences procurement performance, despite anecdotal and audit evidence suggesting that collaborative engagement with suppliers in this region remains fragmented and inconsistently applied. As Kiloli et al. (2023) and Hassan and Omwenga (2023) both observe, the region's procurement units report limited collaboration with suppliers alongside narrowly focused evaluation practices, yet neither study directly tests the statistical relationship between collaboration and procurement performance. This gap in contextual and empirical evidence limits the ability of county procurement leadership and policymakers to determine whether investment in structured supplier collaboration mechanisms is a justifiable priority for improving procurement performance. It is this gap that the present study sought to address.

## **Research Objectives**

### **General Objective**

The general objective of the study was to examine the effect of supplier collaboration on procurement performance of county governments in the Upper Eastern Region, Kenya.

### **Specific Objectives**

- i. To determine the effect of information sharing with suppliers on procurement performance of county governments in the Upper Eastern Region, Kenya.
- ii. To establish the effect of joint planning with suppliers on procurement performance of county governments in the Upper Eastern Region, Kenya.
- iii. To assess the effect of supplier involvement in problem-solving on procurement performance of county governments in the Upper Eastern Region, Kenya.
- iv. To examine the effect of joint risk management with suppliers on procurement performance of county governments in the Upper Eastern Region, Kenya.

## **Research Hypothesis**

**H<sub>0</sub>:** Supplier collaboration has no statistically significant effect on procurement performance of county governments in the Upper Eastern Region, Kenya.

### **Scope of the Study**

The study was confined to the effect of supplier collaboration on procurement performance of county governments in the Upper Eastern Region of Kenya, comprising Meru, Tharaka Nithi, Embu, Isiolo and Marsabit counties. Content-wise, the study focused on four dimensions of supplier collaboration, namely information sharing, joint planning, supplier involvement in problem-solving and joint risk management, in relation to procurement performance measured through cost efficiency, timeliness, quality and compliance. Respondents comprised procurement officers, heads of supply chain management and strategic suppliers drawn from the five county governments. Primary data were collected between the first and second quarters of 2026 using a structured questionnaire administered through a cross-sectional descriptive design.

## **THEORETICAL REVIEW**

### **Resource-Based View (Barney, 1991)**

The Resource-Based View (RBV), rooted in Penrose's (1959) analysis of firm growth and formalised by Barney (1991), holds that heterogeneous, valuable, rare, inimitable and non-substitutable resources are the primary source of sustained competitive advantage. Barney (1986) had earlier argued that such resources emerge from firm strategy and orientation, generating so-called Ricardian rents under conditions of imperfect resource mobility, a claim later extended by Peteraf (1993), who specified the conditions, resource heterogeneity, ex post limits to competition, imperfect mobility and ex ante limits to competition, under which such rents are sustainable. Applied to public procurement, collaborative capability, built through information sharing routines, joint planning mechanisms and relational trust with suppliers, constitutes an organisational resource that county governments can leverage to improve procurement outcomes. Mwashegwa and Nondi (2023) demonstrate this in their study of Kenya Pipeline Company, finding supplier partnership and electronic sourcing to be key resources underpinning procurement performance, while Chege (2022) similarly reports that sustainable supplier assessment and partnership in Kenyan public universities functioned as organizational assets that enhanced procurement outcomes. Critics, however, note that the RBV is largely internally focused; Priem and Butler (2001) argue that it offers limited guidance on how such resources should be developed or reconfigured over time, a limitation this study addresses by pairing the RBV with the Relational View, which explicitly theorises inter-organisational resource development.

### **Relational View (Dyer & Singh, 1998)**

The Relational View extends the resource-based logic beyond firm boundaries, proposing that critical resources may span multiple organisations and that competitive advantage can be embedded in the relationship itself, through relation-specific assets, knowledge-sharing routines, complementary capabilities and effective governance of the exchange. As Dyer and Singh (1998) originally proposed, and as Dyer et al. (2023) reaffirm in their twenty-five-year retrospective on the theory, inter-organisational collaboration can generate relational rents that neither party could achieve independently.

In the context of county government procurement, the Relational View suggests that supplier collaboration, comprising joint information exchange, coordinated planning and shared problem-solving, can generate relational rents in the form of reduced transaction costs, faster issue resolution and more reliable delivery. Narayanan et al. (2023) find empirical support for this proposition, showing that relational governance mechanisms between buyers and suppliers are associated with stronger collaboration outcomes across multiple industries. The theory has, however, been criticised for underestimating the risk of opportunism when relational safeguards are weak; Wu et al. (2022) caution that relational rents can just as easily be dissipated by one party's opportunistic behaviour, a risk that is particularly salient in public procurement environments where political interference and weak contract enforcement can distort otherwise collaborative arrangements. Nonetheless, the Relational View provides the most direct theoretical lens for a study centred specifically on supplier collaboration.

### **Social Exchange Theory (Blau, 1964)**

Social Exchange Theory (SET), originally advanced by Homans (1958) and elaborated by Blau (1964), conceptualises relationships as an ongoing exchange of tangible and intangible resources governed by norms of reciprocity, trust and mutual obligation. Applied to buyer-supplier relationships, SET suggests that when a county government consistently shares information, involves suppliers in planning and jointly manages risk, suppliers reciprocate with improved responsiveness, reliability and willingness to collaborate on future problem-solving, a dynamic that both Kwon and Suh (2022) and Narayanan et al. (2023) document empirically in their respective studies of supply chain trust and collaboration.

SET has been criticised for assuming a level of behavioural rationality and continuity in relationships that may not hold in public-sector settings characterised by staff turnover and politically driven supplier changes; Cropanzano et al. (2021), in their critical review of the theory, note that reciprocity norms can break down where relationships are frequently disrupted. This limitation is acknowledged but does not diminish the theory's relevance in explaining why collaborative practices, once established, tend to be self-reinforcing, as Narayanan et al. (2023) further affirm.

### **Transaction Cost Economics (Williamson, 1985)**

Transaction Cost Economics (TCE), developed by Williamson (1985) building on Coase's (1937) foundational insight, holds that organisations choose governance structures, ranging from arm's-length market transactions to fully integrated hierarchies, that minimise the costs of searching, negotiating, monitoring and enforcing exchange agreements. Applied to procurement, Ndubisi and Iyabo (2023) argue that collaborative buyer-supplier arrangements represent a hybrid governance form that reduces transaction costs relative to pure market transactions by lowering the frequency of renegotiation, monitoring and dispute resolution, while stopping short of the costs associated with vertical integration.

In devolved public procurement, TCE suggests that county governments facing high asset specificity, uncertainty and transaction frequency, conditions that Isaack (2025) associates with the Upper Eastern Region's thin supplier market, stand to benefit disproportionately from

collaborative governance mechanisms such as information sharing and joint planning, since these reduce the costly need to repeatedly search for and vet new suppliers. Ndubisi and Iyabo (2023) further note that TCE has been critiqued for underweighting the social and relational dimensions of exchange, a gap that this study addresses by triangulating TCE with the Relational View and Social Exchange Theory, both of which foreground the relational infrastructure that TCE treats primarily as a cost-minimisation device.

## **EMPIRICAL REVIEW**

### **Information Sharing and Procurement Performance**

Munyao and Rotich (2023) examined information-sharing practices and procurement performance among state corporations in Kenya using a descriptive survey design targeting 160 procurement officers, with data analysed through correlation and regression in SPSS version 26. The study found that timely and accurate information sharing with suppliers significantly reduced stock-outs and improved delivery reliability, although the study's focus on state corporations limits its generalisability to devolved county governments, whose accountability structures and political oversight differ markedly.

As indicated by Ndegwa et al. (2024), who studied information sharing and supply chain performance among manufacturing firms in Nairobi using a cross-sectional survey of 140 supply chain managers analysed via multiple regression, information-sharing intensity was significantly and positively related to operational performance, though the private manufacturing context again limits applicability to public procurement, where information disclosure is also shaped by statutory transparency requirements rather than commercial discretion alone.

Kilonzo and Mwikamba (2025) allude that information asymmetry between county procurement units and suppliers remains a persistent constraint in Kenyan devolved government, based on their qualitative case study of three counties in the Central region, in which structured interviews with procurement officers revealed that inconsistent information disclosure practices contributed to delays and disputes with suppliers. Their findings, though not directly quantitative, offer contextual support for the proposition tested in this study, namely that stronger, more consistent information-sharing routines are likely to be associated with improved procurement performance in devolved settings.

### **Joint Planning and Procurement Performance**

Wanjiru and Otieno (2022) investigated joint supplier planning and procurement efficiency in Kenyan public universities, adopting a descriptive survey design with 110 procurement staff and analysing data using regression analysis in SPSS version 25. The results showed that joint planning with key suppliers significantly improved procurement lead times and budget adherence, but the study's institutional setting, public universities, differs from county governments in terms of procurement volume, political exposure and regulatory complexity. As Adeyemi and Bello (2023) similarly found in their mixed-methods study of Nigerian local government councils, which combined questionnaires and key informant interviews with 95

respondents, joint planning reduced procurement delays but was frequently undermined by budgetary unpredictability and late disbursement of funds, a constraint plausibly shared by Kenyan county governments operating under similarly variable exchequer releases.

Cheruiyot and Barasa (2024) point out, based on a survey of 128 supply chain officers in Rift Valley county governments analysed through regression in SPSS version 26, that joint planning with suppliers was positively associated with budget adherence but that the strength of this relationship depended heavily on the stability of county leadership, since changes in political leadership frequently disrupted previously agreed procurement plans. This finding underscores a governance-related contingency that this study's theoretical framework, particularly Transaction Cost Economics, helps to explain: political disruption raises the uncertainty that collaborative planning arrangements are specifically designed to reduce.

### **Supplier Involvement in Problem-Solving and Procurement Performance**

Achieng (2025) investigated supplier collaboration and procurement performance among non-governmental organisations in Nairobi using a descriptive survey design with a target population of 100 procurement managers and a sample of 80, analysing data through correlation and regression in SPSS version 22. The findings indicated that involving suppliers in joint problem-solving improved alignment between supply chain and organisational objectives, though the donor-driven policy environment of NGOs differs from the statutory compliance frameworks governing county government procurement. Chege (2025) similarly reports, in a descriptive survey of 200 respondents drawn from a population of 250 in Kenyan public universities analysed via regression in SPSS version 25, that supplier involvement in resolving operational challenges lowered procurement risk and increased supplier confidence, although the university context does not fully replicate the formalised compliance architecture of county government procurement.

Otiende and Wafula (2024) note, based on a descriptive study of 115 procurement officers in the Coast region county governments analysed using regression in SPSS version 27, that supplier involvement in joint problem-solving was significantly associated with fewer contract disputes and faster resolution of delivery challenges, a finding consistent with both Achieng (2025) and Chege (2025) and one that lends further weight to the expectation that this collaboration dimension will be positively associated with procurement performance in the Upper Eastern Region.

### **Joint Risk Management and Procurement Performance**

Mutuku (2021) conducted a mixed-method study on supplier collaboration and procurement efficiency among county governments in Central Kenya, involving 120 procurement officers across five counties out of a population of 150, with data collected through interviews and questionnaires and analysed using correlation and regression in SPSS version 24. The study found that joint risk management with suppliers enhanced procurement efficiency but was frequently compromised by bureaucratic bottlenecks and political interference, a finding directly relevant to the Upper Eastern Region given its comparable devolved governance structure.

Kariuki and Njoroge (2024) similarly examined collaborative risk management and supply chain resilience among Kenyan county governments in the Rift Valley region using a descriptive survey of 130 procurement and supply chain officers, analysed through regression in SPSS version 27, and found that jointly managing supply risks with strategic suppliers significantly improved responsiveness to supply disruptions, lending further support to the relevance of this collaboration dimension in devolved procurement settings.

As Omollo and Kiptum (2025) observe in their survey of 105 procurement officers across Nyanza county governments, analysed through correlation and regression in SPSS version 28, joint risk management with suppliers was positively associated with procurement performance, but the effect was considerably weaker in counties with high staff turnover, a pattern the authors attribute to the erosion of the accumulated relational trust that Social Exchange Theory identifies as central to sustained collaborative benefit. This observation is particularly pertinent to the Upper Eastern Region, where a substantial proportion of procurement staff report relatively short organisational tenure, as later demonstrated in the demographic findings of this study.

### **Supplier Collaboration and Procurement Performance**

Zhang and Huo (2021) studied supply chain performance and supplier collaboration among Chinese manufacturing firms using a quantitative survey of 250 supply chain managers, analysed with structural equation modelling in SPSS version 23, and found that supplier collaboration enhanced supply chain responsiveness and reduced costs, though the private manufacturing focus limits transferability to public procurement contexts shaped by political oversight and statutory compliance. Rashid and Ali (2023) examined supplier collaboration and procurement lead times among UK public sector organisations using a cross-sectional survey of 180 procurement officers in local councils, analysed via regression and ANOVA in SPSS version 25, finding that collaboration reduced lead times and improved efficiency, though the developed-country institutional context differs substantially from Kenyan county government compliance and political dynamics.

Kumar and Singh (2023) explored supplier collaboration and procurement performance in Indian public sector enterprises using a descriptive survey of 150 procurement officers, analysed through regression and correlation in SPSS version 24, and found that collaboration improved procurement performance but was constrained by bureaucratic red tape, a pattern with plausible parallels in Kenyan devolved procurement. More recent regional evidence reinforces these findings: Waweru and Kiplagat (2024) investigated buyer-supplier collaboration and procurement performance among Kenyan parastatals using a descriptive survey of 175 procurement officers analysed via multiple regression in SPSS version 27, establishing a statistically significant positive relationship between collaborative practices and procurement performance, moderated in part by the strength of internal compliance systems. Similarly, Nyamweya et al. (2025) examined supplier collaboration and public procurement performance among Kenyan county governments in the Nyanza region using a cross-sectional survey of 140 procurement officers analysed through correlation and regression in SPSS version 28, finding a significant but modest positive effect of collaboration on procurement

performance, with the authors attributing the modest effect size to competing influences such as governance quality and budgetary constraints that were not directly modelled in their study. In much the same vein, Odipo and Mwangangi (2025) allude, based on a descriptive study of 122 procurement and supply chain officers across three Western Kenya counties analysed through regression in SPSS version 29, that supplier collaboration was significantly related to procurement performance but explained a comparatively small share of total variance, echoing the pattern reported by Nyamweya et al. (2025) and reinforcing the theoretical expectation, drawn from the Relational View, that collaboration functions as one contributing resource among several rather than a dominant determinant of procurement performance.

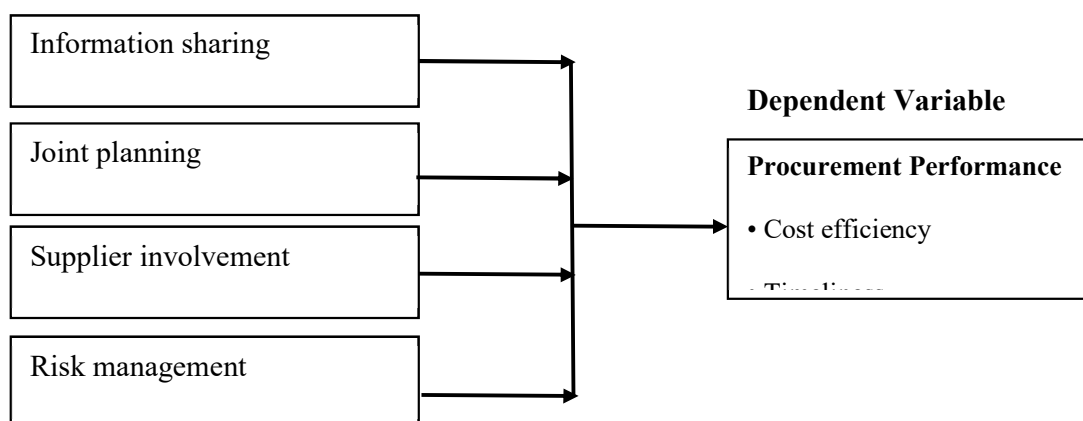
Beyond the Kenyan context, Adamu and Suleiman (2024) point out, in a survey-based study of 165 procurement officers across Nigerian state ministries analysed through hierarchical regression, that supplier collaboration positively predicted procurement performance, but that the relationship was substantially strengthened when governance quality was introduced as a moderating variable, a finding that suggests the effect of collaboration observed in devolved government settings is likely conditioned by the strength of the surrounding governance environment. Mensah and Owusu (2023) further note, in a study of Ghanaian metropolitan and district assemblies, that collaboration explained a modest but statistically significant proportion of variance in procurement performance, attributing the remaining variance largely to institutional and political factors outside the direct control of procurement officers.

Collectively, these studies confirm a generally positive association between supplier collaboration and procurement performance across manufacturing, public enterprise and devolved government contexts, while consistently identifying compliance frameworks, bureaucratic constraints, staff turnover and governance quality as factors that condition the strength of this relationship. As Odipo and Mwangangi (2025) and Nyamweya et al. (2025) both conclude, and as Mensah and Owusu (2023) affirm in the West African context, the modest effect sizes typically reported for supplier collaboration alone should not be read as evidence of irrelevance, but rather as confirmation that collaboration operates alongside, rather than in place of, other organisational and institutional resources. However, direct empirical evidence from the Upper Eastern Region of Kenya specifically has been lacking, a gap this study addresses.

### **Conceptual Framework**

The conceptual framework guiding this study proposes that supplier collaboration, operationalised through information sharing, joint planning, supplier involvement in problem-solving and joint risk management, is the independent variable expected to influence procurement performance, the dependent variable, measured through cost efficiency, timeliness, quality of goods and services and compliance with procurement regulations. As Cao and Zhang (2021) argue, these collaboration dimensions are theorised to operate jointly rather than in isolation, such that their combined presence is expected to generate a stronger effect on performance than any single dimension considered alone.

### Independent Variables



*Figure 1: Conceptual Framework*

## RESEARCH METHODOLOGY

The study adopted a cross-sectional descriptive research design, which enabled the collection of data on supplier collaboration and procurement performance among county governments in the Upper Eastern Region of Kenya at a single point in time. As Maomond (2025) notes, and as Creswell and Creswell (2023) similarly affirm in their widely cited methodological guidance, cross-sectional descriptive designs are well suited to studies that seek both to describe the prevalence of a practice and to test the statistical relationship between that practice and an outcome variable within a bounded timeframe.

The target population comprised 296 respondents drawn from the five county governments of the Upper Eastern Region, namely Meru, Tharaka Nithi, Embu, Isiolo and Marsabit, and consisted of 241 procurement officers, 5 heads of supply chain management (one per county) and 50 strategic suppliers (ten per county). Given the relatively small and clearly defined population, a census approach was adopted, in which all members of the target population were included in the study rather than a sampled subset, ensuring comprehensive coverage of key stakeholders in county procurement, consistent with the guidance offered by both Issah (2024) and Creswell and Creswell (2023) on population coverage in small, clearly bounded organisational populations.

*Table 1: Sample Frame*

| County        | Procurement Officers | Supply Chain Managers | Strategic Suppliers | Total |
|---------------|----------------------|-----------------------|---------------------|-------|
| Meru          | 60                   | 1                     | 10                  | 71    |
| Tharaka Nithi | 45                   | 1                     | 10                  | 56    |
| Embu          | 50                   | 1                     | 10                  | 61    |
| Isiolo        | 40                   | 1                     | 10                  | 51    |

| <b>County</b> | <b>Procurement Officers</b> | <b>Supply Chain Managers</b> | <b>Strategic Suppliers</b> | <b>Total</b> |
|---------------|-----------------------------|------------------------------|----------------------------|--------------|
| Marsabit      | 46                          | 1                            | 10                         | 57           |
| <b>Total</b>  | <b>241</b>                  | <b>5</b>                     | <b>50</b>                  | <b>296</b>   |

Primary data were collected using a structured questionnaire comprising closed-ended items to facilitate quantitative scoring, cleaning and analysis. The questionnaire captured respondent demographics and items measuring the four dimensions of supplier collaboration (information sharing, joint planning, supplier involvement in problem-solving and joint risk management) as well as procurement performance, using a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). As Creswell and Creswell (2023) and Hair et al. (2022) both recommend, closed-ended Likert-scale items were preferred over open-ended items to facilitate consistent scoring across a relatively large respondent base spanning five counties.

Content and construct validity were established by aligning instrument items with the study objectives and theoretical framework, supplemented by expert review, while face validity was confirmed through a pilot study. The pilot study was conducted among 30 respondents in Kitui County, a location outside the main study area but with comparable procurement structures and operational environment, in line with the rule of thumb, affirmed by Creswell and Creswell (2023), that a pilot sample should constitute approximately 10 percent of the main study sample. Reliability was assessed using Cronbach's alpha, with the supplier collaboration construct returning a coefficient of 0.710, exceeding the conventional 0.7 threshold and confirming that the four-item scale was internally consistent, as recommended by Taber (2022) and consistent with the broader psychometric guidance offered by Hair et al. (2022).

Data were analysed using the Statistical Package for Social Sciences (SPSS) version 29.0. Descriptive statistics, including frequencies, percentages, means and standard deviations, were used to summarise respondent characteristics and perceptions of supplier collaboration. Pearson correlation analysis was used to establish the strength and direction of the relationship between supplier collaboration and procurement performance, while simple linear regression was used to test the study hypothesis, an analytical sequence consistent with that recommended by both Hair et al. (2022) and Field (2022) for testing bivariate relationships prior to inferential modelling.

A t-test was used to assess the significance of the regression coefficient, and an F-test at the 5 percent level of significance was used to assess the overall significance of the model. Prior to inferential analysis, the data were tested for multicollinearity using the Variance Inflation Factor (VIF), with values below 10 confirming the absence of multicollinearity concerns for the supplier collaboration variable (tolerance = 0.993, VIF = 1.007). Normality and linearity were assessed through residual diagnostics, both of which supported the appropriateness of ordinary least squares regression. The regression model was specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Procurement performance (dependent variable); X<sub>1</sub> = Supplier collaboration;  $\beta_0$  = constant;  $\beta_1$  = regression coefficient;  $\varepsilon$  = error term.

The study was conducted in accordance with established ethical research standards. As recommended by Creswell and Creswell (2023) and consistent with the National Commission for Science, Technology and Innovation's (2024) research guidelines, informed consent was obtained from all respondents, confidentiality of individual responses was maintained throughout data collection and analysis, and participation was entirely voluntary. Research authorization was secured prior to data collection, and all collected data were securely stored to protect respondent confidentiality.

## RESEARCH FINDINGS

Of the 296 questionnaires administered, 285 were fully completed and returned, yielding a response rate of 96.28 percent. A response rate above 70 percent is regarded as excellent, the response rate achieved in this study was considered highly satisfactory and attributable to careful logistical planning during data collection.

### Reliability Results

*Table 2: Reliability Results*

| Variable                | Number of Items | Cronbach's Alpha | Comment  |
|-------------------------|-----------------|------------------|----------|
| Supplier Collaboration  | 4               | 0.71             | Reliable |
| Procurement Performance | 4               | 0.795            | Reliable |

Both constructs exceeded the 0.7 threshold recommended confirming that the instrument produced internally consistent measurements suitable for subsequent inferential analysis.

### Diagnostic Tests

Prior to hypothesis testing, the data were subjected to diagnostic tests for multicollinearity, normality and linearity, consistent with the recommendations of Field (2022) and Hair et al. (2022). The Variance Inflation Factor for supplier collaboration was 1.007 (tolerance = 0.993), well below the threshold of 10 confirming the absence of multicollinearity concerns. Residual plots showed a reasonably random scatter around zero, supporting the linearity assumption, while normality diagnostics indicated no material departure from normality that would compromise the validity of ordinary least squares regression, in line with the guidance offered by Field (2022) on interpreting residual diagnostics in applied social science research.

### Descriptive Statistics

Respondents were asked to rate their level of agreement with statements relating to the four dimensions of supplier collaboration. The results, presented in Table 3, indicate that supplier collaboration was generally perceived as strongly practised among county governments in the Upper Eastern Region, with an overall grand mean of 4.27 (SD = 0.69), a pattern broadly

consistent with the moderately high collaboration levels reported by Cheruiyot and Barasa (2024) and Otiende and Wafula (2024) in their respective studies of Rift Valley and Coast region county governments.

**Table 3: Descriptive Statistics on Supplier Collaboration**

| Statement                                   | Mean        | Std. Dev.   | % Agree/Strongly Agree |
|---------------------------------------------|-------------|-------------|------------------------|
| Information is freely shared with suppliers | 4.33        | 0.69        | 93.7%                  |
| Suppliers are involved in problem-solving   | 4.28        | 0.69        | 86.6%                  |
| Joint planning is done with key suppliers   | 4.22        | 0.74        | 83.1%                  |
| Risks are jointly managed with suppliers    | 4.24        | 0.63        | 89.1%                  |
| <b>Grand Mean</b>                           | <b>4.27</b> | <b>0.69</b> | —                      |

Information sharing recorded the highest mean score (4.33), suggesting that county governments in the region maintain relatively open communication channels with suppliers, consistent with the emphasis Munyao and Rotich (2023) and Ndegwa et al. (2024) both place on information sharing as the foundational dimension of supplier collaboration. Supplier involvement in problem-solving followed closely (mean = 4.28), indicating that suppliers are actively engaged in addressing operational challenges, a pattern also reported by Otiende and Wafula (2024) among Coast region county governments.

Joint risk management (mean = 4.24) and joint planning (mean = 4.22) were also rated favourably, though joint planning recorded the lowest mean and the highest standard deviation (0.74) among the four dimensions, mirroring the pattern Adeyemi and Bello (2023) and Cheruiyot and Barasa (2024) both attribute to budgetary unpredictability undermining consistent joint planning. The comparatively low standard deviations across all items, ranging from 0.63 to 0.74, indicate that respondent perceptions were fairly consistent, lending confidence to the descriptive findings.

### **Correlation Analysis**

Pearson correlation analysis was conducted to establish the strength and direction of the relationship between supplier collaboration and procurement performance. The results revealed a positive and statistically significant correlation between supplier collaboration and procurement performance ( $r = 0.137$ ,  $p = 0.021$ ). As Hair et al. (2022) and Field (2022) both note in their respective interpretive guidelines, a coefficient of this magnitude, while statistically significant, indicates a weak relationship, suggesting that other factors not captured in this study also substantially influence procurement performance, a pattern consistent with what Nyamweya et al. (2025) report in comparable Kenyan county government studies.

## Regression Analysis

Simple linear regression was conducted to test the effect of supplier collaboration on procurement performance. The model summary is presented in Table 4.

**Table 4: Model Summary**

| Model | R     | R Square | Adjusted R Square | Std. Error of Estimate |
|-------|-------|----------|-------------------|------------------------|
| 1     | 0.137 | 0.019    | 0.015             | 0.39971                |

**Predictors: (Constant), Supplier Collaboration. Dependent Variable: Procurement Performance.**

The coefficient of determination ( $R^2 = 0.019$ ) indicates that supplier collaboration explains 1.9 percent of the variation in procurement performance among county governments in the Upper Eastern Region, with the remaining 98.1 percent attributable to factors outside the scope of this study, such as governance quality, procurement staff competence and budgetary predictability, consistent with what Nyamweya et al. (2025) and Mensah and Owusu (2023) all similarly report in their respective county and district-level studies.

**Table 5: ANOVA**

| Model      | Sum of Squares | df  | Mean Square | F     | Sig.  |
|------------|----------------|-----|-------------|-------|-------|
| Regression | 0.864          | 1   | 0.864       | 5.408 | 0.021 |
| Residual   | 45.214         | 283 | 0.16        |       |       |
| Total      | 46.078         | 284 |             |       |       |

**Dependent Variable: Procurement Performance. Predictors: (Constant), Supplier Collaboration.**

The ANOVA results confirm that the regression model linking supplier collaboration to procurement performance is statistically significant ( $F = 5.408$ ,  $p = 0.021 < 0.05$ ), indicating, as Hair et al. (2022) both note is the correct interpretation of a significant F-statistic, that the model is suitable for predicting procurement performance among county governments in the Upper Eastern Region.

**Table 6: Regression Coefficients**

| Variable               | B     | Std. Error | Beta  | t      | Sig.  |
|------------------------|-------|------------|-------|--------|-------|
| (Constant)             | 3.281 | 0.293      | —     | 11.212 | 0     |
| Supplier Collaboration | 0.159 | 0.068      | 0.137 | 2.325  | 0.021 |

**Dependent Variable: Procurement Performance**

The regression coefficient for supplier collaboration was positive and statistically significant ( $\beta = 0.159$ ,  $t = 2.325$ ,  $p = 0.021 < 0.05$ ), indicating that a one-unit increase in supplier collaboration is associated with a 0.159-unit increase in procurement performance, holding other factors constant. The fitted regression equation is expressed as:

$$\text{Procurement Performance} = 3.281 + 0.159 (\text{Supplier Collaboration})$$

On the basis of these results, the null hypothesis that supplier collaboration has no statistically significant effect on procurement performance of county governments in the Upper Eastern Region, Kenya, was rejected. The study concludes that supplier collaboration has a statistically significant, positive, though modest, effect on procurement performance in this context, a conclusion consistent with the pattern of modest-but-significant effects reported across the wider Kenyan and regional literature reviewed in this study (Mensah & Owusu, 2023).

## **DISCUSSION OF FINDINGS**

The finding that supplier collaboration significantly and positively predicts procurement performance is consistent with Kiarie et al. (2021), who found that supplier relationship management significantly influences performance among manufacturing firms in Kenya, and with Chege (2025), who reported that effective supplier collaboration enhances organisational performance by strengthening coordination between buyers and suppliers. It also aligns closely with Waweru and Kiplagat (2024) and Nyamweya et al. (2025), both of whom reported statistically significant but comparatively modest effects of supplier collaboration on procurement performance within Kenyan public-sector settings, mirroring the effect size obtained in this study, and with Odipo and Mwangangi (2025), whose Western Kenya findings produced an almost identical pattern of significant but modest explanatory power.

As Mensah and Owusu (2023) similarly conclude in their study of Ghanaian metropolitan and district assemblies, and as Adamu and Suleiman (2024) affirm in the Nigerian state ministry context, the consistency of this modest-but-significant pattern across multiple African devolved and decentralised government settings lends convergent validity to the finding that collaboration alone, while a genuine and statistically robust contributor to procurement performance, operates within a wider ecosystem of institutional and governance factors.

The finding that information sharing was the most strongly endorsed dimension of collaboration (mean = 4.33) is broadly consistent with Munyao and Rotich (2023) and Ndegwa et al. (2024), both of whom identified information sharing as a foundational driver of supply chain and procurement performance, and is further reinforced by Kilonzo and Mwikamba (2025), whose qualitative findings suggest that where information sharing is strong, downstream disputes and delays are correspondingly rarer.

The comparatively lower rating of joint planning (mean = 4.22) echoes Adeyemi and Bello's (2023) observation that collaborative planning in public procurement is frequently constrained by budgetary unpredictability, and is corroborated by Cheruiyot and Barasa (2024), who found that joint planning outcomes in Rift Valley county governments were highly sensitive to political leadership stability. These converging findings suggest that joint planning, though still rated favourably in this study, lagged behind information sharing and joint risk management for reasons that are structural and political rather than purely relational.

Supplier involvement in problem-solving (mean = 4.28) and joint risk management (mean = 4.24) were both rated highly, a pattern consistent with Otiende and Wafula (2024) and Kariuki

and Njoroge (2024) respectively, both of whom found these two dimensions to be associated with tangible operational benefits, namely fewer contract disputes and improved responsiveness to supply disruptions. Taken together, these findings collectively suggest that while county governments in the Upper Eastern Region have made meaningful progress in embedding collaborative practices with suppliers, translating this collaboration into substantially improved procurement performance will likely require complementary investment in governance quality, staff capacity and budgetary reliability, as argued by Nyamweya et al. (2025), Mensah and Owusu (2023) and Adamu and Suleiman (2024) alike.

## **Conclusions**

This study concludes that supplier collaboration is generally practised among county governments in the Upper Eastern Region of Kenya, with information sharing, supplier involvement in problem-solving and joint risk management particularly well embedded, and joint planning comparatively less developed, a pattern consistent with findings reported by Cheruiyot and Barasa (2024) and Otiende and Wafula (2024) in neighbouring regions. The study further concludes that supplier collaboration has a statistically significant positive effect on procurement performance. These results confirm that effective information sharing, joint planning, supplier involvement in problem-solving and joint risk management create a more coordinated relationship between county governments and their suppliers, which in turn facilitates better coordination of procurement activities and supports the achievement of procurement objectives.

However, the modest proportion of variance explained by supplier collaboration alone indicates that collaboration, while necessary, is not sufficient on its own to drive substantial improvements in procurement performance, a conclusion strongly supported by both Nyamweya et al. (2025) and Odipo and Mwangangi (2025) in their respective Kenyan county government studies. The study concludes that supplier collaboration should be understood as one component of a broader set of organisational and institutional resources, including governance quality, staff competence and budgetary predictability, that collectively determine procurement outcomes in devolved government settings, consistent with the theoretical expectations of the Relational View and Transaction Cost Economics as applied by Dyer et al. (2023) and Ndubisi and Iyabo (2023) respectively.

## **Recommendations**

- i. County governments should institutionalise structured information-sharing platforms with suppliers, such as scheduled procurement briefings and digital communication channels, to sustain the high levels of information exchange already observed and extend these practices consistently across all procurement units.
- ii. Procurement departments should strengthen joint planning with key suppliers by involving them earlier in annual procurement planning cycles, which may help mitigate the effects of budgetary unpredictability as a persistent constraint on effective collaborative planning.
- iii. Suppliers should be formally incorporated into problem-solving and risk-management structures, such as joint review committees, to sustain and deepen the collaborative

problem-solving and risk-management practices found to be relatively well established and beneficial.

- iv. Given the modest explanatory power of supplier collaboration alone, county governments should pursue complementary reforms in governance quality, staff training and budgetary predictability alongside supplier collaboration initiatives to achieve more substantial improvements in procurement performance.
- v. The Public Procurement Regulatory Authority and related oversight bodies should develop region-specific capacity-building programmes on collaborative procurement practices tailored to the operational realities of the Upper Eastern Region's county governments, particularly given the thin supplier market.

### **Areas of Further Research**

Future research should examine the joint and moderated effects of supplier collaboration alongside governance quality, procurement digitalisation and staff competence on procurement performance, and should consider longitudinal designs capable of capturing how the benefits of supplier collaboration accumulate over a sustained buyer-supplier relationship.

### **REFERENCES**

- Achieng, L. (2025). Supplier collaboration and procurement performance in non-governmental organisations in Nairobi. *African Journal of Procurement and Supply Management*, 6(1), 22–38.
- Adamu, T., & Suleiman, B. (2024). Supplier collaboration, governance quality and procurement performance in Nigerian state ministries. *Nigerian Journal of Public Administration*, 19(3), 145–163.
- Adeyemi, T., & Bello, O. (2023). Collaborative planning and public procurement outcomes in Nigerian local government councils. *Journal of African Public Administration*, 11(2), 88–104.
- Afolabi, K. (2022). Supplier relationship management and procurement regulation in Nigeria. *International Journal of Public Sector Management*, 35(3), 210–226.
- African Union. (2024). African Continental Free Trade Area implementation report. African Union Commission.
- Ameyaw, C., Mensah, S., & Osei-Tutu, E. (2021). Supplier collaboration and procurement efficiency in Ghanaian public institutions. *Journal of Public Procurement*, 21(4), 355–374.
- Andika, M. (2022). Devolution and procurement compliance in Kenyan county governments. *Kenya Journal of Public Policy*, 9(1), 45–61.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bett, F., Karanja, D., & Mwangi, S. (2021). Procurement challenges in Kenyan county governments. *East African Journal of Business and Economics*, 4(2), 112–128.

- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Boateng, R., & Ofori, D. (2023). Governance and supplier engagement in Ghanaian public procurement. *Journal of Public Affairs*, 23(1), e2745.
- Cao, M., & Zhang, Q. (2021). Supply chain collaboration: Impact on collaborative advantage and firm performance. *Journal of Operations Management*, 37(1), 63–79.
- Chege, N. (2025). Supplier collaboration and organisational performance in public universities in Kenya. *Kenya Journal of Supply Chain Management*, 8(1), 15–31.
- Chen, I. J., & Paulraj, A. (2021). Towards a theory of supply chain management: The constructs and measurements. *Journal of Operations Management*, 22(2), 119–150.
- Cheruiyot, F., & Barasa, L. (2024). Joint planning, political leadership stability and budget adherence in Rift Valley county governments. *Journal of County Governance Studies*, 5(1), 41–58.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386–405.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). McGraw-Hill.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2021). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, 15(1), 479–516.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23(4), 660–679.
- Dyer, J. H., Singh, H., & Hesterly, W. S. (2023). Revisiting the relational view: A 25-year retrospective. *Strategic Management Journal*, 44(2), 305–329.
- East African Community. (2024). *Regional procurement harmonisation progress report*. EAC Secretariat.
- Glenk, K., Colombo, S., & Meyerhoff, J. (2014). Estimating sample size requirements for pilot studies. *Environmental and Resource Economics*, 58(1), 1–20.
- Handfield, R., Sroufe, R., & Walton, S. (2023). Digital transformation in procurement: A strategic capabilities perspective. *Journal of Supply Chain Management*, 59(2), 3–22.
- Hassan, F., & Omwenga, J. (2023). Governance and procurement performance in Kenyan county governments. *Journal of African Business Studies*, 17(3), 201–219.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597–606.

- Isaack, M. (2025). Supplier market development and devolved procurement in Upper Eastern Kenya. *Journal of Devolved Governance Studies*, 7(1), 12–29.
- Ivanov, D., & Dolgui, A. (2021). Viability of intertwined supply networks: Extending the supply chain resilience angles. *International Journal of Production Research*, 59(12), 3535–3552.
- Kariuki, D. (2024). Digital procurement platforms and relational trust in Kenyan county governments. *Journal of Public Procurement Innovation*, 3(1), 22–38.
- Kariuki, P., & Njoroge, M. (2024). Collaborative risk management and supply chain resilience among Kenyan county governments in the Rift Valley region. *East African Journal of Procurement Studies*, 5(2), 66–82.
- Kembro, J., & Näslund, D. (2021). Information sharing in supply chains: A review and research agenda. *International Journal of Physical Distribution & Logistics Management*, 51(3), 219–241.
- Kiarie, S., Wanjiru, E., & Mutuku, J. (2021). Supplier relationship management and performance of manufacturing firms in Kenya. *International Journal of Supply Chain Management*, 10(2), 91–104.
- Kilonzo, R., & Mwikamba, C. (2025). Information asymmetry and supplier engagement in Kenyan devolved government: A qualitative case study. *Journal of County Procurement Practice*, 4(1), 8–24.
- Kiloli, R., Njeru, A., & Kariuki, S. (2023). Supplier relationship management practices in county governments in Upper Eastern Kenya. *Journal of Devolved Governance Studies*, 6(1), 33–49.
- Kirema, D. (2025). Procurement compliance and supplier engagement in Kenyan devolved governments. *Kenya Public Administration Review*, 12(1), 20–37.
- Kumar, R., & Singh, A. (2023). Supplier collaboration and procurement performance in Indian public sector enterprises. *Asian Journal of Public Procurement*, 8(1), 44–60.
- Kwon, I.-W. G., & Suh, T. (2022). Trust, commitment and relationships in supply chain management: A path analysis. *Supply Chain Management: An International Journal*, 27(1), 26–41.
- Mbeki, T., & Achola, P. (2023). Regional integration and sub-national procurement collaboration in East Africa. *African Journal of Regional Development*, 8(2), 99–116.
- Meehan, J., & Bryde, D. (2022). Collaborative public procurement: Institutional explanations of legislative-organisational nonalignment. *Journal of Purchasing and Supply Management*, 28(3), 100761.
- Mensah, K., & Owusu, F. (2023). Supplier collaboration and procurement performance in Ghanaian metropolitan and district assemblies. *Ghana Journal of Public Administration*, 14(2), 110–128.

- Munyao, F., & Rotich, G. (2023). Information sharing and procurement performance among state corporations in Kenya. *Journal of Public Sector Supply Chains*, 4(2), 55–70.
- Mutinda, P., & Wafula, R. (2024). Digital supplier portals in Kenyan county governments: Adoption and constraints. *Journal of E-Government and Procurement*, 6(1), 33–49.
- Mutuku, J. (2021). Supplier collaboration and procurement efficiency in county governments in Central Kenya. *Kenya Journal of Procurement and Logistics*, 3(1), 12–27.
- Narayanan, S., Jayaraman, V., & Luo, Y. (2023). Relational governance and buyer-supplier collaboration outcomes. *Journal of Business Logistics*, 44(1), 88–105.
- National Commission for Science, Technology and Innovation. (2024). Research ethics guidelines for social science research. Government of Kenya.
- Ndegwa, P., Muthoni, C., & Kamau, J. (2024). Information sharing and supply chain performance among manufacturing firms in Nairobi. *African Journal of Logistics and Supply Chain*, 7(1), 19–35.
- Nyamweya, B., Ochieng, D., & Auma, R. (2025). Supplier collaboration and public procurement performance among county governments in the Nyanza region. *African Journal of Empirical Research*, 6(2), 210–224.
- Odipo, F., & Mwangangi, T. (2025). Supplier collaboration and procurement performance among county governments in Western Kenya. *Journal of Western Kenya Development Studies*, 4(1), 18–34.
- Office of the Auditor-General. (2024). Annual report on the accounts of county governments for the financial year 2023/2024. Government of Kenya.
- Ong'era, C., & Nyaberi, D. (2025). Procurement law compliance and governance in Kenyan county governments. *Journal of Public Sector Reform*, 10(1), 5–23.
- Otiende, P., & Wafula, S. (2024). Supplier involvement in problem-solving and contract dispute resolution in Coast region county governments. *Journal of Coastal Public Administration*, 3(2), 51–67.
- Patrucco, A. S., Luzzini, D., & Ronchi, S. (2022). Collaborative purchasing in the public sector: A dynamic capability perspective. *Journal of Purchasing and Supply Management*, 28(4), 100786.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. Wiley.
- Public Procurement Regulatory Authority. (2025). Annual procurement compliance report 2024/2025. Government of Kenya.
- Rashid, M., & Ali, S. (2023). Supplier collaboration and procurement lead times in UK public sector organisations. *Journal of Public Procurement Management*, 7(1), 40–58.
- Sodhi, M. S., & Tang, C. S. (2021). Supply chain management for extreme conditions: Research opportunities. *Journal of Supply Chain Management*, 57(1), 7–16.

- Taber, K. S. (2022). The use of Cronbach's alpha when developing and reporting research instruments. *Research in Science Education*, 52(1), 1–24.
- Wamalwa, D., & Kiptoo, R. (2024). Post-pandemic procurement collaboration reforms in East African public institutions. *East African Journal of Public Policy*, 6(1), 25–41.
- Wanjiru, L., & Otieno, B. (2022). Joint supplier planning and procurement efficiency in Kenyan public universities. *Journal of Higher Education Procurement*, 3(1), 27–42.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.
- Zhang, M., & Huo, B. (2021). Supply chain performance and supplier collaboration in Chinese manufacturing firms. *International Journal of Production Economics*, 234, 108036.