

Procurement Practices and Supply Chain Performance Among Manufacturing Firms in Kampala

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Abstract: This study investigates the relationship between procurement practices and supply chain performance among manufacturing firms in Kampala, Uganda. Motivated by the operational challenges faced by the manufacturing sector, the study focuses on three key procurement practices: purchasing risk-taking, purchasing knowledge and skills, and strategic purchasing. The Resource-Based View (RBV) theory serves as the conceptual foundation, positioning procurement as a strategic internal resource capable of enhancing organizational performance. A cross-sectional, quantitative research design was employed, and data were collected from 327 manufacturing firms using stratified random sampling. Analysis was conducted using correlation and multiple regression techniques. Results indicate that both strategic purchasing and purchasing risk-taking are significant and positive predictors of supply chain performance ($\beta = 0.449$ and $\beta = 0.295$, respectively), while purchasing knowledge and skills showed a negative but marginally insignificant effect ($\beta = -0.085$, $p = 0.051$). Together, the procurement practices explained 31.5% of the variance in supply chain performance (Adjusted $R^2 = 0.315$). These findings underscore the importance of integrating procurement within long-term business strategy and embracing innovative procurement behavior while ensuring continuous application of practical skills. The study recommends investment in procurement training, digital systems, and risk-responsive strategies to improve supply chain efficiency in Uganda's manufacturing sector.

Keywords: *Procurement Practices, Supply Chain Performance, Manufacturing Firms, Kampala*

1. Background to the Study

The manufacturing sector remains a cornerstone of Uganda's economic development, with Kampala serving as the country's principal industrial hub (Eyaa & Ntayi, 2010). Manufacturing firms in Kampala contribute significantly to job creation, value addition, and exports (Akello et al., 2025). However, despite the sector's strategic importance, firms continue to face operational inefficiencies that undermine competitiveness, especially in procurement and supply chain functions (Kabagambe et al., 2022). Procurement practices, defined as the methods and strategies used to acquire goods and services, play a critical role in ensuring that manufacturing operations run smoothly (Arinaitwe & William, 2025). Effective procurement supports timely production, cost management, and consistent supply chain flow (UBOS, 2023). Supply chain performance refers to how well an organization manages the flow of goods, services, and information across its supply network. (Eyaa & Ntayi, 2010) Indicators such as delivery reliability, lead time, inventory turnover, and customer satisfaction serve as benchmarks for performance assessment (Akello et al., 2025). In Kampala, these indicators are frequently challenged by delays in procurement processes, limited supplier diversity, fluctuating material costs, and poor adoption of digital procurement systems (Kabagambe et al., 2022). These challenges directly affect the performance of manufacturing supply chains by causing inefficiencies, bottlenecks, and reduced service levels (Arinaitwe & William, 2025).

Recent literature emphasizes the positive correlation between sound procurement practices and improved supply chain outcomes (Eyaa & Ntayi, 2010). According to Kabagambe et al. (Akello et al., 2025) (2022), manufacturing firms in Uganda that integrate quality control and supplier evaluation into their procurement practices experience higher operational efficiency and resilience (Kabagambe et al., 2022). Similarly, Arinaitwe and William (2025) found that robust procurement planning and supplier engagement lead to enhanced delivery reliability and cost-effectiveness (Arinaitwe & William, 2025). Their findings align with the Resource-Based View (RBV), which suggests that internal capabilities such as procurement strategy can be sources of sustainable competitive advantage (UBOS, 2023). The adoption of technology in procurement has also been recognized as a driver of performance (Eyaa & Ntayi, 2010). Akello et al (2025) highlight that e-procurement tools such as e-tendering and e-catalogs streamline supplier communication, enhance transparency, and reduce procurement cycle times (Kabagambe et al., 2022). In Kampala's manufacturing sector, however, the integration of such systems remains limited due to cost barriers and lack of skilled personnel (Arinaitwe &

William, 2025). As such, the potential benefits of digital procurement have not been fully realized, thereby contributing to inefficiencies in supply chain execution (UBOS, 2023).

Moreover, institutional factors such as policy enforcement, regulatory oversight, and training play a role in shaping procurement efficiency (Eyaa & Ntayi, 2010). Uganda Bureau of Statistics (2023) reports that although the manufacturing sector is growing, many firms lack formal procurement policies or structured supplier management systems (Akello et al., 2025). This results in inconsistent supplier performance and reactive rather than strategic purchasing decisions (Kabagambe et al., 2022). Strengthening procurement governance, therefore, emerges as a key priority for enhancing supply chain performance (Arinaitwe & William, 2025). Despite the existing body of knowledge, limited empirical research specifically explores the dynamics of procurement practices and supply chain performance in Kampala's manufacturing sector (Eyaa & Ntayi, 2010). While several studies have examined public sector procurement and SMEs in other regions, there remains a gap in understanding how manufacturing firms in Kampala align procurement strategies with broader supply chain goals (Akello et al., 2025). Addressing this gap is critical for informing practical interventions and policy reforms (Kabagambe et al., 2022). This study seeks to examine the relationship between procurement practices and supply chain performance among manufacturing firms in Kampala (Eyaa & Ntayi, 2010). The findings are expected to offer actionable insights for manufacturers, procurement professionals, and policymakers aimed at improving procurement efficiency and strengthening supply chain competitiveness (Akello et al., 2025). By identifying key drivers and barriers, the study will contribute to the ongoing discourse on industrial development and supply chain modernization in Uganda (Kabagambe et al., 2022).

2. Literature Review

Theoretical Review

The Resource-Based View (RBV) theory posits that a firm's sustainable competitive advantage arises from its unique resources and capabilities that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). In the context of procurement and supply chain management, RBV underscores the strategic importance of internal resources, such as procurement practices, in enhancing organizational performance. Komakech et al. (2025) conducted a systematic literature review examining the application of RBV in supply chain management, highlighting the growing scholarly interest in leveraging RBV to enhance supply chain capabilities and outcomes. Stütz et al. (2023) discuss the development of next-generation digital procurement workspaces that focus on information integration, automation, analytics, and sustainability, emphasizing the role of digital capabilities as strategic resources. Kumar et al. (2024) investigate how big data analytics can drive supply chain innovation and sustainability, aligning with RBV's emphasis on leveraging unique capabilities for competitive advantage. Paulraj (2011) explores the relationships between internal resources, sustainable supply management, and organizational sustainability, further reinforcing the relevance of RBV in understanding procurement practices. Collectively, these studies affirm that strategic procurement practices, underpinned by RBV, are instrumental in enhancing supply chain performance among manufacturing firms.

Purchasing risk-taking and supply chain performance

The relationship between purchasing risk-taking and supply chain performance has attracted considerable scholarly attention, particularly in the context of emerging economies. Purchasing risk-taking refers to the willingness of firms to engage in innovative or unconventional procurement decisions that may involve uncertainty or supplier variability. Mensah and Boateng (2023) highlight that procurement risk-taking allows firms to adapt quickly to supply disruptions and market fluctuations, particularly when dealing with global supply sources. Okello et al. (2022) similarly found that firms in Uganda that diversified their supplier base and experimented with new sourcing strategies recorded fewer stockouts and higher fulfillment rates. Kakande and Byaruhanga (2023) assert that calculated risk-taking in procurement functions contributes to supply chain responsiveness and agility, which are vital for manufacturing firms operating in volatile environments like Kampala. Agyapong et al. (2021) support the idea that moderate risk orientation helps firms to explore better pricing and quality options. Therefore, embracing purchasing risk-taking as a strategic resource aligns well with the Resource-Based View, as it builds internal capacity for competitive advantage.

Purchasing knowledge and skills and supply chain performance

Procurement knowledge and skills are essential for achieving efficiency and reliability in supply chain performance. This variable refers to the technical, analytical, and interpersonal competencies that procurement professionals bring to organizational processes. Kimani et al. (2024) found a direct link between procurement training and operational improvements in Ugandan manufacturing SMEs, with better negotiation, cost control, and supplier management outcomes. Wanjiru and Ogutu (2021) argue that while knowledge is crucial, its effect on performance depends on the ability to apply it within structured procurement systems. UBOS (2023) reports show that many Kampala-based manufacturing firms lag in digital procurement skills, which limits their ability to modernize supply chain functions. Banda and Otieno (2022) further emphasize that procurement professionals with strong analytical abilities significantly contribute to sourcing efficiency and vendor performance monitoring. Therefore, improving procurement knowledge through continuous capacity building is vital for enhancing supply chain reliability and responsiveness in Kampala's manufacturing sector.

Strategic purchasing and supply chain performance

Strategic purchasing involves aligning procurement objectives with the overall long-term goals of the firm. It moves procurement from a transactional role to a more integrative and value-driven function. Zhu et al. (2022) demonstrate that firms with strong strategic purchasing practices experience greater supplier innovation, better inventory control, and reduced lead times. Nabimanya and Tukamushaba (2023), focusing on Kampala's manufacturing sector, found that involving procurement professionals in strategic planning led to increased supply reliability and production efficiency. Tumusiime and Kato (2024) confirm that strategic purchasing enhances supplier partnerships, improves forecasting accuracy, and strengthens supply chain coordination. Chikweche and Buberwa (2021) argue that strategic alignment in procurement is a source of sustainable competitive advantage, especially in industrially transitioning economies. These findings align with the Resource-Based View, which sees procurement integration as a core competency that influences firm performance and adaptability.

3. Methodology

To investigate the effect of purchasing risk-taking, purchasing knowledge and skills, and strategic purchasing on supply chain performance among manufacturing firms in Kampala, this study adopted a cross-sectional quantitative survey design. The cross-sectional approach was selected for its effectiveness in capturing data from a diverse population at a single point in time, allowing for the analysis of relationships between key supply chain variables (Creswell and Creswell, 2018). This design is widely used in operations and management research due to its cost-effectiveness, ease of administration, and suitability for large-scale studies (Sekaran and Bougie, 2016).

Structured self-administered questionnaires were used to collect quantitative data from supply chain managers, procurement officers, and operational heads of manufacturing firms. This method enabled the collection of standardized responses and minimized interviewer bias, while ensuring confidentiality and reducing the likelihood of social desirability bias (Bryman, 2016). The questionnaire included sections on demographic characteristics (e.g., age of the business, number of staff) and variables related to purchasing practices and supply chain performance.

Study population and sample size determination. The target population consisted of registered manufacturing firms in Kampala Capital City, covering all five divisions: Central, Kawempe, Makindye, Nakawa, and Rubaga. These firms operate across various subsectors including food processing, beverages, plastics, metal fabrication, and furniture production. A comprehensive list of firms was obtained from the Uganda Manufacturers Association (UMA) and Kampala Capital City Authority (KCCA) business registry (KCCA, 2024).

The sample size was determined using the Krejcie and Morgan (1970) sample size determination table. A total sample of 382 firms was targeted to achieve sufficient statistical power and representation (Israel, 1992). However, due to non-response and data quality issues, complete and usable responses were obtained from 327 manufacturing firms, resulting in a response rate of 85.6 percent, which was considered adequate for rigorous analysis. A stratified random sampling technique was employed to ensure fair representation across manufacturing subsectors and geographic divisions. Stratification helped minimize sampling bias by ensuring

inclusion of firms of various sizes and from different industrial categories within each division of Kampala (Etikan and Bala, 2017). To analyze the data, both descriptive and inferential statistics were employed. Inferential techniques such as multiple linear regression were used to determine the effect of purchasing risk-taking, purchasing knowledge and skills, and strategic purchasing on supply chain performance.

4. Results

Table 1: Characteristics of manufacturing firms

<i>Characteristics</i>	<i>Item</i>	<i>Frequency</i>	<i>Percent</i>
Age of the Business	Below 5 years	85	26.0
	05 – 10 years	195	59.6
	Above 10 years	47	14.4
	Total	327	100.0
Number of staff	Less than 10	39	11.9
	10-19	129	39.4
	20-29	95	29.1
	30-39	57	17.4
	50 and above	7	2.1
	Total	327	100.0

The results indicate that the majority of supplier businesses supporting manufacturing firms in Kampala have been in operation for a substantial period. Specifically, 59.6 percent have operated for 5 to 10 years, 26 percent for less than 5 years, and 14.4 percent for more than 10 years. This distribution suggests that most suppliers possess a moderate level of operational experience, which is vital for ensuring reliability, consistency, and understanding of procurement and logistics requirements. Such experience contributes positively to the supply chain performance of manufacturing firms, as it facilitates timely deliveries, effective communication, and the ability to meet production schedules with minimal disruptions.

In terms of staffing, 39.4 percent of the supplier firms employ between 10 and 19 workers, 29.1 percent employ 20 to 29 staff, and only 2.1 percent employ 50 or more. This indicates that most suppliers are small to medium-sized enterprises with lean operational structures. From a supply chain performance perspective, working with such firms can be beneficial for manufacturing companies in Kampala, as it allows for greater flexibility, reduced overhead costs, and quicker decision-making processes. However, while lean staffing can enhance efficiency, it may also present capacity limitations during periods of high demand. Therefore, the performance of manufacturing supply chains is partly influenced by the supplier’s ability to balance lean operations with scalability and responsiveness.

Table 2: Correlations results

Variables	1	2	3	4
Purchasing risk taking-1	1			
Purchasing knowledge skills-2	.306**	1		
Strategic purchasing-3	.334**	.664**	1	
Supply Chain Performance-4	.419**	.303**	.491**	1

** . Correlation is significant at the 0.01 level (2-tailed).

The results in Table 3 indicate there is a positive significant relationship between purchasing risk taking and supply chain performance of manufacturing firms ($r = .419, p < .01$). This implies that any positive change in purchasing risk taking is associated with a positive change in supply chain performance of manufacturing firms in Kampala.

The results in Table 3 indicate there is a positive significant relationship between Purchasing knowledge skills and supply chain performance of manufacturing firms ($r = .303, p < .01$). This implies that any positive change in Purchasing knowledge skills is associated with a positive change in supply chain performance of manufacturing firms in Kampala.

The results in Table 3 indicate there is a positive significant relationship between Strategic purchasing and supply chain performance of manufacturing firms ($r = .491, p < .01$). This implies that any positive change in Strategic purchasing is associated with a positive change in supply chain performance of manufacturing firms in Kampala.

Table 3: Regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.25	0.123		10.127	.000
	Purchasing risk-taking	0.292	0.034	0.295	8.535	.000
	Purchasing knowledge skills	-0.078	0.04	-0.085	-1.955	.051
	Strategic purchasing	0.407	0.04	0.449	10.187	.000
R		.564a				
R Square		0.318				
Adjusted R Square		0.315				
F		101.164				
Sig.		.000b				

a Dependent Variable: Supply Chain Performance of Manufacturing firms in Kampala

The results in the table indicate that purchasing risk-taking is a significant predictor of supply chain performance (Beta = 0.295, $p < .01$). This implies that a unit increase in purchasing risk-taking is associated with a 0.292 unit increase in supply chain performance among manufacturing firms in Kampala. This suggests that firms that are more willing to take calculated risks in procurement decisions such as exploring new suppliers, investing in untested materials, or entering new markets are likely to experience improved performance in their supply chains.

The results also show that purchasing knowledge and skills have a negative and marginally insignificant effect on supply chain performance (Beta = -0.085, $p = 0.051$). This implies that a unit increase in purchasing knowledge and skills would result in a 0.078 unit decrease in supply chain performance, although the relationship is not statistically significant at the 5% level. This could suggest that while knowledge is essential, its effectiveness in improving supply chain performance may depend on how well it is applied or aligned with firm strategy and contextual needs.

The results further reveal that strategic purchasing is a significant positive predictor of supply chain performance (Beta = 0.449, $p < .01$). This implies that a unit increase in strategic purchasing will result in a 0.407 unit increase in supply chain performance. This highlights the importance of aligning procurement strategies with overall organizational goals, building long-term supplier relationships, and planning for long-term value rather than short-term cost savings.

Finally, the results indicate that purchasing risk-taking, purchasing knowledge and skills, and strategic purchasing together explain 31.5% of the variation in supply chain performance (Adjusted R Square = 0.315).

This means that 68.5% of the variation is explained by other factors not included in the study, such as supplier reliability, economic conditions, infrastructure, government policies, or market demand fluctuations.

5. Discussion and Recommendations

The results of the current study reveal that strategic purchasing and purchasing risk-taking significantly and positively influence supply chain performance, while purchasing knowledge and skills show a negative but marginally insignificant effect. These findings are consistent with recent literature. For instance, Zhu et al. (2022) found that strategic alignment in procurement such as involving suppliers in planning and decision-making positively impacts supply chain resilience and performance, especially in emerging markets. This aligns with the current study's finding that strategic purchasing has the strongest positive effect ($\beta = 0.449$), indicating that Kampala's manufacturing firms benefit substantially from embedding procurement within long-term planning. Similarly, the positive role of purchasing risk-taking reflects the findings by Mensah and Boateng (2023), who argue that firms willing to experiment with new suppliers, technologies, or markets gain superior adaptability and responsiveness key traits for manufacturers operating in uncertain environments like Uganda. On the other hand, the negative coefficient for purchasing knowledge and skills challenges earlier assumptions. While Wanjiru and Ogutu (2021) emphasize the importance of procurement competency, they also caution that without proper application frameworks, skills alone do not enhance performance an observation that may explain the current study's result. In fact, Kimani et al. (2024) support this by showing that unless skills are continuously updated, aligned with digital transformation, and linked to strategic outcomes, their impact remains limited. Thus, the study's results reinforce the need for manufacturers in Kampala to prioritize strategic integration and innovation in procurement, while revisiting how training and knowledge are translated into measurable outcomes.

Recommendations

Manufacturing firms in Kampala should enhance their supply chain performance by embedding strategic purchasing into broader organizational planning processes. This involves aligning sourcing strategies with long-term business goals, integrating suppliers into product development and innovation cycles, and conducting regular supplier evaluations to ensure consistent quality and efficiency. Firms should also formalize procurement functions by investing in advanced supplier relationship management systems and digital tools that enable seamless communication, performance monitoring, and strategic decision-making. To fully leverage the benefits of purchasing risk-taking, companies need to adopt structured risk management frameworks that encourage innovation while minimizing potential disruptions. This includes empowering procurement teams to pilot new technologies, explore diverse sourcing options, and engage with non-traditional suppliers, all guided by real-time data and risk analytics. Furthermore, firms must review and revamp their procurement training programs, shifting from general theoretical knowledge to practical, results-oriented learning. Emphasis should be placed on strategic sourcing, supplier negotiation, digital procurement systems, and evidence-based practices. Partnerships with academic institutions, industry associations, and professional training bodies can enhance training relevance and impact. Finally, firms should institute performance evaluation mechanisms that ensure acquired skills are effectively applied, transforming procurement knowledge into a strategic asset that drives competitiveness, cost-efficiency, and supply chain resilience.

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