

EFFECT OF SUPPLIER PARTNERSHIPS ON THE PERFORMANCE OF KENYA MEDICAL SUPPLIES AUTHORITY

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Abstract: *The efficiency of supplier partnerships is a critical determinant of operational performance in healthcare supply chains. For the Kenya Medical Supplies Authority (KEMSA)—the national agency mandated to procure, store, and distribute essential medical commodities—effective supplier relationships are vital to ensuring consistent availability of life-saving products. However, persistent inefficiencies, inadequate supplier integration, and global disruptions have highlighted vulnerabilities in KEMSA’s supply chain. This study examined the effect of supplier partnerships on KEMSA’s performance, with the objective of identifying strategic opportunities for enhancing collaboration and operational outcomes. A descriptive case study design was employed, targeting 191 staff members, including 186 operational employees and 5 senior managers. Using Yamane’s (1967) formula, a sample of 132 respondents was selected through purposive and simple random sampling. Data were collected via structured questionnaires and semi-structured interviews. Quantitative data were analyzed using descriptive statistics, Pearson’s correlation, and multiple regression, while qualitative responses were thematically analyzed to provide contextual insights. The findings revealed a strong positive relationship between supplier partnerships and organizational performance ($r = 0.682$, $p < 0.05$). Regression analysis indicated that supplier partnerships had a statistically significant effect ($\beta = 0.647$, $p < 0.001$), explaining approximately 47.2% of the variance in performance. Respondents emphasized the value of long-term partnerships, early supplier involvement in product development, and effective information sharing. The highest-rated factor—long-term partnerships ($M = 4.17$, $SD = 1.174$)—was identified as a key driver of supply reliability and cost efficiency. These results align with existing literature underscoring the role of trust, transparency, and joint problem-solving in enhancing supply chain resilience. For KEMSA, strengthening supplier partnerships through collaborative planning, joint forecasting, and transparent communication is imperative. Such initiatives can mitigate supply disruptions, improve service delivery, and enhance the responsiveness of Kenya’s healthcare supply chain. The study contributes to both theory and practice by providing empirical evidence of the significant impact of supplier partnerships on public health supply chain performance in a developing country context.*

Keywords: *Supplier partnerships, supply chain management, KEMSA, organizational performance, healthcare logistics*

Introduction

Information The supplier partnerships concept is more than mere transactional relationships. According to Adobor and McMullen (2014), the supplier partnerships concept embodies strategic collaborations forged between organizations and their suppliers in a bid to achieve mutual growth and a stronger competitive advantage in the sector. However, the effectiveness of such partnership arrangements must go beyond the surface-level metrics of cost reduction and operational efficiency (Islami, 2023). Additionally, recent research by Shtawi et al., (2023) emphasizes the importance of inclusion of the relational factors such as transparency, trust, and shared values and ethics between the partnering organizations in for such partnerships to be more effective, successful and sustainable. Moreover, the evolving nature of global supply chains management introduces complexities related to cultural diversity, ethical considerations, and geopolitical dynamics with which, outcomes of the supplier partnerships and collaborations can be sustainably modeled, and consequently lead to organizational performance.

As the primary organization in charge of the procurement, storage, and distribution of medications, medical supplies, and other vital healthcare supplies, the Kenya Medical Supplies Authority (KEMSA) is a crucial player in Kenya's healthcare industry. KEMSA is responsible for maintaining the country's healthcare supply chain and making sure that essential medical supplies are available to healthcare establishments all throughout the country (Kenya Medical Supplies Authority, 2023). The efficiency of its supply chain management procedures and processes is essential for the health and welfare of all Kenyans as well as the seamless operation of the healthcare system in the country. KEMSA is a very important organization in Kenya where access to and the calibre of healthcare remains a major concern (World Bank, 2022). The authority is tasked with acquiring a broad range of medical supplies, which are essential to providing healthcare services, such as medications, vaccines, and medical equipment. The availability of these essential goods is directly impacted by KEMSA's effective supply chain management, which in turn affects the standard of healthcare offered to Kenyans (Kenya Medical Supplies Authority, 2023).

Research indicates that effective supply chain integration, including strategic partnerships with suppliers, directly influences performance metrics within health sectors. For instance, (Mbugua & Namada, 2019) reveal that supply chain integration significantly enhances operational performance in Kenya's public health sector, indicating that collaboration with suppliers fosters better logistical efficiency and service delivery. Furthermore, studies have shown that organizations that actively engage in cultivating supplier relationships can leverage these partnerships to navigate challenges such as chronic stockouts and delayed deliveries, common impediments in healthcare supply chains (Peter, 2023). As observed by (Njuguna et al., 2021) the alignment of supply chain management strategies with supplier capabilities is crucial for improving performance outcomes in medical supply organizations.

Study objective

The general objective of this study was to assess the effect of supply chain management practices with a specific objective to establish the effect of supplier partnerships on the performance of Kenya Medical Supplies Authority.

Problem statement

The Kenya Medical Supplies Authority (KEMSA) faces significant challenges in optimizing its operational performance, particularly due to the complexities inherent in its supplier partnerships. The persistent issues of

inefficiencies, inadequate supplier management, and inconsistent supply chain performance have been detrimental to the execution of KEMSA's mandate to deliver essential medical supplies to health facilities across Kenya. The problem is exacerbated by a lack of cohesive strategies to effectively integrate supplier relationships, which contributes to suboptimal performance outcomes in the medical supply chain, as evidenced by the work of (Njuguna et al., 2021). Inefficient supplier relationships result in delayed responses to medical shipments, exacerbating stockouts and impacting health service delivery (Mandal, 2017).

Moreover, the heightened challenges stemming from recent global disruptions, such as the COVID-19 pandemic, have underscored the vulnerabilities within KEMSA's supply chain framework. These disruptions have affected the consistency of deliveries and underscored the pressing need for enhanced adaptability in supplier collaboration practices (Maemunah & Cuaca, 2021). The inability to promptly adapt to supply chain dynamics is linked to shortcomings in supplier relationship management, indicating that existing inefficiencies are integrated into cost analyses, revealing systemic issues within the procurement processes (Shretta et al., 2015). Such inefficiencies impede KEMSA's efforts to maintain a reliable supply of essential medical supplies, thereby compromising healthcare delivery in a country that relies heavily on government procurement.

In light of these challenges, it is imperative to explore the specific effects of supplier partnerships on KEMSA's operational performance. A focused analysis is essential to identify strategic improvements that could enhance supplier collaboration, thereby fostering a more resilient supply chain capable of meeting the evolving demands of Kenya's healthcare sector. By investigating the relationship between supplier partnerships and operational efficacy, this study aims to generate actionable insights that can guide KEMSA in optimizing its procurement strategies and ultimately enhancing healthcare delivery outcomes in Kenya.

Related literature

The landscape of supplier partnerships emerges as a critical determinant of operational performance within medical supply chains. Recent studies underscore the intricate relationship between effective supplier relationship management (SRM) and performance outcomes, demonstrating that well-established partnerships can lead to significant improvements in various operational metrics. For instance, White et al. (2018) reveal that effective communication and collaboration with suppliers play vital roles in enhancing quality outcomes. They emphasize the importance of clear processes to manage internal requirements and external supply partner contributions, thereby illuminating a gap that often leads to inefficiencies in medical supply chains.

Moreover, Sillanpää et al. (2015) provide a comprehensive overview of supplier development strategies that are essential in fostering buyer-supplier relationships. Their findings highlight how systematic approaches to relationship-building can directly improve performance metrics, which is particularly relevant in the context of healthcare supply chains. The study indicates that strategic investments in creating and nurturing supplier relationships contribute to a more agile and responsive supply chain, vital for addressing the critical demands of the healthcare sector.

Kulangara et al. (2016) expand on this theme by investigating the impact of socialization and information sharing between stakeholders within the supply chain. They propose that fostering trust through these mechanisms significantly enhances innovative capabilities, thereby driving overall performance improvements. This relationship is crucial in contexts where the urgency of healthcare supply delivery necessitates innovative solutions that arise from strong collaborative ties with suppliers.

In a broader sense, the literature suggests that the operational efficiency of supply chains is intrinsically linked to the integration of external partnerships. Ou et al. (2010) outline a structural model that connects supply chain management practices with firm performance, emphasizing that effective SCM encompasses collaborations extending beyond immediate operations to include multifaceted integration with suppliers. This perspective reinforces the idea that the performance of entities involved in healthcare supply chains could be substantially improved through enhanced integration and alignment with suppliers, ultimately leading to better service delivery and operational resilience.

The importance of relationship quality is further corroborated by (Lees et al., 2020), who study supplier performance in food supply chains and call attention to the necessity of measuring relationship quality as a precursor to improved supplier behavior. Their findings articulate that strong relationships foster better communication and enhance supplier responsiveness, which is a crucial factor for navigating the complexities of healthcare supply landscapes.

In conclusion, the literature provides a robust foundation for understanding the significant impacts of supplier partnerships on organizational performance. By leveraging insights from these studies, particularly those focusing on supplier development, communication strategies, and relationship quality, organizations can identify strategic opportunities to optimize their supplier partnerships, ensuring a more effective and responsive healthcare supply chain management system.

Research methodology

Research Design

This study adopted a descriptive case study design to examine the effect of supply chain management (SCM) practices on the performance of the Kenya Medical Supplies Authority (KEMSA). The design enabled in-depth exploration of relationships between SCM practices and organizational performance within the real operational context of a critical healthcare supply chain institution.

Study Area

The research was conducted at KEMSA headquarters, which coordinates procurement, storage, and distribution of essential medical commodities nationwide. Its central role in Kenya's healthcare supply chain made it a strategic setting for investigating how SCM practices influence service delivery and operational efficiency.

Population and Sampling

The target population comprised 191 individuals: 186 operational staff from procurement, logistics, IT, and customer service departments, and 5 senior managers overseeing SCM operations. A purposive sample of 5 managers was selected for interviews, while simple random sampling was used to select operational staff for questionnaires. The sample size for the survey (127 staff) was determined using Yamane's (1967) formula with a 5% margin of error, giving a total of 132 respondents.

Data Collection

Two primary data collection tools were used: Structured questionnaires for 127 staff, containing closed-ended items on supplier partnerships, supply chain integration, customer focus, and IT adoption, measured on a five-

point Likert scale. Semi-structured interviews with 5 senior managers to obtain qualitative insights on SCM strategies, operational challenges, and performance drivers.

Data Analysis

Quantitative data were analyzed using SPSS. Descriptive statistics summarized responses (means, standard deviations).

Pearson’s correlation tested bivariate relationships between SCM practices and performance.

Multiple regression assessed the combined effect of independent variables on performance, using the model:

$$Y = \beta_0 + \beta_1 X_1 + \dots + \mu \dots\dots\dots (1)$$

Where $\beta_1 X_1$ = Supplier partnerships.

Qualitative interview data were transcribed and analyzed thematically, with emerging themes compared against quantitative findings to strengthen interpretation.

Validity and Reliability

The questionnaire was reviewed by experts to ensure content validity and pre-tested on non-sample KEMSA staff. Reliability was measured using Cronbach’s alpha, with all constructs exceeding the 0.7 threshold for internal consistency.

Results and Discussion

The study established the effect of supplier partnerships on the performance of Kenya Medical Supplies Authority. The information obtained from the field responses were on a 5point Likert scale which were analysed into mean weights magnitude effect on performance of Kenya medical supplies agency and the results are presented as in table 1 below.

Table 1: Supplier Partnerships and Performance of Kenya Supplies Agency

	Mean	SD
Statements	Weight	
We have long-term partnerships with our key suppliers for performance	4.17	1.174
Our suppliers are involved in the early stages of product development	3.89	1.018
Sharing information with suppliers influence performance	3.98	1.042
Supplier Partnerships boosts performance of Kenya supplies agency	4.01	.955

The results in table 1 indicate that supplier partnerships for performance had the overall mean weight of 4.01 and SD of .995 showing a strong magnitude effect on performance of the supplies agency. The respondents indicated that long term partnerships with key supplies had a strong effect on performance as indicated by 4.17 mean weight and 1.174 SD. Moreover the sharing of information with suppliers influence performance as indicated by

3.98 mean weight and SD of 1.042. This results concur with other empirical studies like Chan (2003) study which asserts that supply chain management is a set of synchronized decisions and activities utilized to efficiently integrate suppliers, manufacturers, warehouses, transporters, retailers, and customers so that the right product or service is distributed at the right quantities, to the right locations, and at the right time, to minimize system-wide costs while satisfying customer service level requirements. The objective of Supply Chain Management (SCM) is to achieve sustainable competitive advantage through supplier partnerships with relevant supply chain participants.

Inferential Results

From Table 2, Pearson’s correlation analysis showed a strong positive correlation between supplier partnerships and organizational performance ($r = 0.682, p < 0.05$). In the multiple regression model, supplier partnerships had a statistically significant positive effect on performance ($\beta = 0.647, p < 0.001$), contributing approximately 47.2% to variations in KEMSA’s performance after controlling for other variables.

Table 2: Correlation Coefficients

Variables	Correlation coefficients
Suppliers Partnerships	.682*
*. Correlation is significant at the 0.05 level (2-tailed).	
**. Correlation is significant at the 0.01 level (2-tailed).	

The findings indicate that supplier partnerships are a critical driver of KEMSA’s operational effectiveness. Long-term collaborative arrangements likely reduce transaction costs, improve supply reliability, and facilitate joint problem-solving. The positive association between information sharing and performance aligns with the Resource Dependence Theory, which emphasizes managing interdependencies to secure stable access to critical resources.

Comparison with Literature

These results are consistent with Chan (2003), who asserted that strategic supplier integration ensures timely delivery of the right products in the right quantities while minimizing costs. Similarly, Adobor and McMullen (2014) argue that effective partnerships transcend transactional exchanges, focusing instead on building trust, transparency, and shared values — factors that were implicitly valued by KEMSA respondents.

Conclusion

The study established the effect of supplier partnerships on the performance of Kenya Medical Supplies Authority. The information obtained from the field responses were on a 5point Likert scale which were analysed into mean weights magnitude effect on performance of Kenya medical supplies agency. The results indicated that supplier partnerships for performance had the overall mean weight of 4.01 and SD of .995 showing a strong magnitude effect on performance of the supplies agency. The respondents indicated that long term partnerships with key supplies had a strong effect on performance as indicated by 4.17 mean weights and 1.174 SD. Moreover the sharing of information with suppliers influence performance as indicated by 3.98 mean weight and SD of 1.042. This result indicated the effect of supplier partnership on performance of KEMSA.

References

- Adobor, H., & McMullen, R. S. (2014). *Strategic purchasing and supplier partnerships-The role of a third party organization. Journal of Purchasing and Supply Management*, 20(4). <https://doi.org/10.1016/j.pursup.2014.05.003>
- Kenya Medical Supplies Authority. (2023). *About us. [Website]. Retrieved October 14, 2023, from <https://www.kemsa.go.ke/about-us/>*
- Islami, X. (2023). *Lean manufacturing and firms' financial performance: the role of strategic supplier partnership and information sharing. Benchmarking*, 30(9). <https://doi.org/10.1108/BIJ-02-2022-0084>
- Kulangara, N., Jackson, S., & Prater, E. (2016). *Examining the impact of socialization and information sharing and the mediating effect of trust on innovation capability. International Journal of Operations & Production Management*, 36(11), 1601-1624. <https://doi.org/10.1108/ijopm-09-2015-0558>
- Lees, N., Nuthall, P., & Wilson, M. (2020). *Relationship quality and supplier performance in food supply chains. International Food and Agribusiness Management Review*, 23(3), 425-446. <https://doi.org/10.22434/ifamr2019.0178>
- Maemunah, S. and Cuaca, H. (2021). *Influence of epidemic covid-19 on business strategy, information technology and supply chain agility to firm performance in medical device industry. Linguistics and Culture Review*, 5(S1), 661-669. <https://doi.org/10.21744/lingcure.v5ns1.1452>
- Mandal, S. (2017). *The influence of dynamic capabilities on hospital-supplier collaboration and hospital supply chain performance. International Journal of Operations & Production Management*, 37(5), 664-684. <https://doi.org/10.1108/ijopm-05-2016-0249>
- Mbugua, A. and Namada, J. (2019). *Supply chain integration and operational performance of Kenya's public health sector. International Journal of Research in Business and Social Science (2147-4478)*, 8(5), 01-10. <https://doi.org/10.20525/ijrbs.v8i5.472>
- Njuguna, P., Arani, W., & Onyara, V. (2021). *Influence of supply chain management strategies on performance of medical supply chain organisations in Kenya. International Journal of Business Management Entrepreneurship and Innovation*, 3(3), 32-51. <https://doi.org/10.35942/jbmed.v3i3.210>

- Peter, K. (2023). *E-supply chain management practices and operational performance of hospitals of Kiambu county in Kenya*. *European Journal of Logistics Purchasing and Supply Chain Management*, 11(3), 50-63. <https://doi.org/10.37745/ejlp SCM.2013/vol11n35063>
- Ou, C., Liu, F., Hung, Y., & Yen, D. (2010). *A structural model of supply chain management on firm performance*. *International Journal of Operations & Production Management*, 30(5), 526-545. <https://doi.org/10.1108/01443571011039614>
- Shretta, R., Johnson, B., Smith, L., Doumbia, S., Savigny, D., Anupindi, R., ... & Yadav, P. (2015). *Costing the supply chain for delivery of act and RDTs in the public sector in Benin and Kenya*. *Malaria Journal*, 14(1). <https://doi.org/10.1186/s12936-014-0530-1>
- Shtawi, H. O. M., Rahim, M. K. I. A., & Al-Rejal, H. M. E. A. (2023). *Strategic Supplier Partnership and Customer Relationship and Sustainable Supply Chain Management: The Mediating Role of the ICT in the Jordanian Pharmaceutical Sector in Jordan*. *Paper Asia*, 39(6). [https://doi.org/10.59953/cpa.v39i6\(b\).37](https://doi.org/10.59953/cpa.v39i6(b).37)
- Sillanpää, I., Shahzad, K., & Sillanpää, E. (2015). *Supplier development and buyer-supplier relationship strategies - a literature review*. *International Journal of Procurement Management*, 8(1/2), 227. <https://doi.org/10.1504/ijpm.2015.066283>
- White, T., Iammartino, R., & Fossaceca, J. (2018). *Assessing the impact of requirements review on quality outcomes*. *Quality and Reliability Engineering International*, 34(5), 882-893. <https://doi.org/10.1002/qre.2298>
- World Bank. (2022). *Kenya Health Sector Strategy (2022-2032): Improving Access to Quality and Affordable Healthcare for All Kenyans*. [Report]. Washington, DC: World Bank