

The Impact of Procurement Practices on Organizational Performance: A Literature Review

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Abstract. Effective procurement practices play a critical role in the successful functioning of organizations and directly impact their overall performance. However, many organizations struggle to optimize their procurement processes to achieve desired performance outcomes. This study aims to comprehensively review the existing literature on the impact of procurement practices on organizational performance and identify gaps in the current knowledge base. A systematic evaluation was conducted on published studies between 2017 and 2022. Two authors independently assessed study eligibility, extracted relevant data, and evaluated the risk of bias and study quality. Initially, 1639 references were retrieved, but after applying inclusion criteria and eligibility assessment, only 15 articles were deemed suitable for analysis. The selected articles were thoroughly examined to analyze and synthesize their objectives, methodologies, outcomes, and recommendations. The findings highlight that effective procurement practices enable organizations to secure high-quality goods and services, foster strategic supplier partnerships, and gain a competitive advantage in the marketplace. Conversely, inadequate procurement practices have detrimental effects on overall organizational performance. Furthermore, the study reveals that organizations face significant challenges in optimizing their procurement practices, directly impacting their overall performance. These findings underscore the importance of addressing procurement practices as a critical factor in enhancing organizational performance. Overall, this study contributes to understanding the relationship between procurement practices and organizational performance. It highlights the benefits of effective procurement strategies and emphasizes the risks associated with suboptimal practices. By identifying gaps in the existing literature, this study also provides a foundation for future research to address these gaps and further advance knowledge in this field.

Keywords: Procurement, Performance, Literature review

1. Introduction

Procurement is a critical function that directly affects the performance of every organization, irrespective of its public or private nature. It involves the acquisition of goods, services, and works, encompassing activities such as supplier selection, contract management, and negotiation. Effective procurement practices can yield numerous benefits, including cost savings, improved quality and delivery, enhanced supplier relationships, and increased innovation. Consequently, the ability to optimize procurement processes and strategies has become a focal point for organizations seeking to maximize their overall performance (Cao & Wang, 2022; Mohamud et al., 2023).

According to Patrucco et al. (2019), the role of procurement in organizational performance is crucial and has undergone a significant transformation from a tactical and passive function to a strategic one. This shift has led to an increased emphasis on quality-based procurement, as highlighted by (Balaeva et al. 2021; Patrucco et al. 2016). Strategic procurement acknowledges the importance of procurement quality performance in achieving strategic objectives, as noted by (Anin et al. 2020; Essuman et al. 2021), aligning with the principles of supply chain quality management (Phan et al., 2019). Procurement quality performance, as described by (Patrucco et al. 2016; Yeung et al. 2015), measures the extent to which procured items adhere to predetermined specifications and meet end-users' expectations.

Moreover, within the realm of value generation, procurement holds strategic significance and serves as a crucial driver of competitive advantage (Knight et al., 2017; Schütz et al., 2019). However, procurement is known to be a resource-intensive function, which necessitates the implementation of efficient strategies to minimize procurement expenses (Schütz et al., 2019) while upholding procurement quality performance.

The economic significance of public procurement activities, coupled with the substantial allocation of public funds to these functions, underscores the utmost importance of ensuring their effective organizational and national economic performance (Changalima et al., 2021; Ahmed & Mohamed, 2023). However, the presence of mismanagement and malpractices has led to a less than satisfactory performance of procurement activities in numerous organizations, thereby raising concerns among stakeholders and academics alike (Changalima et al., 2022c; Basheka, 2021; Hui et al., 2011). In addition, within the public sector, inadequate procurement quality performance can often be attributed to corrupt practices in procurement (Balaeva et al., 2021), which underscores the necessity and promotion of procurement audits (Ibrahim et al., 2017; Sabet, 2020).

To attain the desired level of procurement performance, ensuring the efficient and effective execution of procurement functions while upholding principles of good governance and professional ethics (Mchopa, 2020). Organizational efforts should focus on equipping procurement practitioners with the requisite skills to execute procurement activities at a high standard (Lacity & Willcocks, 2017; Changalima & Ismail, 2019). This aligns with the human capital theory, which recognizes skills as essential assets possessed by individuals (Prier et al., 2021). Procurement practitioners acknowledge the significance of possessing specific skills as crucial tools for enhancing procurement activities (Bals et al., 2019; Mwagike & Changalima, 2022). Therefore, the acquisition of procurement management skills plays a crucial role in government procurement activities. As indicated by (Niu and Mu 2020; Changalima and Ismail 2019), the significance of procurement skills in facilitating various tasks, such as supplier management, problem-solving, and effective communication for requirements assessment and planning, has also been recognized.

The existing literature emphasizes the essential nature of procurement skills in conducting effective procurement activities. Insufficient procurement skills have been linked to procurement malpractices (Skipworth et al., 2020), unethical behavior (Israel et al., 2019), and numerous challenges encountered in public sector procurement practices (Mothupi et al., 2022). Procurement practitioners require a range of essential skills, including technical proficiencies such as cost analysis, product knowledge, and computer literacy (Munyimi, 2019). Effective communication skills (Changalima & Ismail, 2019), marketing capabilities, customer care management skills, and risk management competencies (Bag et

al., 2021) are also crucial for procurement professionals. Notably, studies have focused on assessing staff competencies to measure procurement skills (Pettersen et al., 2020; Changalima et al., 2022). Establishing a competent workforce within procurement organizations is vital to improving procurement operations and enhancing overall performance (Odongo & Kazungu, 2022).

This study endeavors to address the limited knowledge surrounding procurement performance by conducting a comprehensive literature review. The primary objective is to examine existing research on how procurement affects the performance of organizations and identify gaps within the current body of knowledge. Recognizing the significance of reviewing prior studies on procurement performance, this research aims to guide researchers and policymakers toward future investigations aimed at enhancing organizational performance by developing effective and efficient procurement practices. By identifying research gaps, this study intends to contribute to the advancement of procurement knowledge and facilitate the implementation of strategies that optimize procurement performance in organizational contexts.

Ultimately, this study seeks to enhance understanding of how procurement practices impact organizational performance. In order to achieve this objective, the following research questions were identified:

1. Which procurement practices have been identified in the literature as significantly affecting organizational performance?
2. How do effective procurement practices contribute to enhancing organizational performance, as measured by metrics such as cost reduction, quality improvement, and supplier relationship management, according to the existing research?

2. Methodology

This section provides an overview of the methodology for accessing publications related to procurement performance. The approach incorporates rigorous procedures along with the examination of relevant articles. Frequently utilized methods for literature reviews, such as Preferred Reporting Items for Systematic Reviews (PRISMA) and Meta-Analyses, formed the basis of the technique employed to locate the articles. PRISMA, which highlights the review report analyzing randomized trials, serves as a fundamental framework for systematic reviews. It also outlines specific criteria for including and excluding articles relevant to this review (Moher et al., 2009). The founders of PRISMA (Moher et al., 2009) have highlighted its suitability for systematic reviews focusing on randomized trials as the primary basis for research, including interventions. However, challenges may arise when evaluating qualitative and mixed-method study designs within the context of PRISMA's framework.

PRISMA employs a comprehensive search across multiple scientific databases and research sources to identify relevant studies thoroughly, minimizing the risk of overlooking significant research (Rosa & Broday, 2018). The screening strategy applied within PRISMA's selection criteria helps streamline the process by reducing the number of identified studies (Moher et al., 2009). Although PRISMA is commonly utilized in medical research, its focus on the need for systematic reviews makes it applicable to the field of operations management as well. Moreover, this approach offers clear inclusion and exclusion criteria tailored to specific research objectives. Recognizing the lack of methodological guidance in various disciplines beyond medicine, researchers have increasingly turned to methodologically-oriented literature articles based on systematic literature reviews to address this gap.

(Zhu & Liu, 2020) have highlighted that Web of Science (WoS) and Scopus are prominent citation databases competing. However, for the purpose of this assessment, the articles were exclusively sourced from the widely recognized database, Scopus. This decision was based on the findings of (Alryalat et al., 2019), who observed that Scopus yielded more documents than WoS. Consequently, opting for Scopus was deemed more suitable for obtaining additional relevant articles to be reviewed. Additionally, (Patel et al., 2021) have emphasized that Scopus stands as the largest multidisciplinary collection of abstracts and citations, solidifying its significance as a valuable resource for researchers seeking

pertinent articles. Notably, Scopus has emerged as a relatively new competitor that challenges the dominant position of WoS.

2.1 Search Strategy and Selection Process

A comprehensive exploration of terms relevant to this review was conducted by employing Scopus search strings. Initially, researchers conducted a keyword search using "Procurement and Performance" as the primary focus. Synonyms, related terms, and variations identified in previous studies were incorporated as additional research keywords to broaden the scope. These expanded keywords were then utilized in the Scopus advanced search tool, resulting in a total of 1,639 articles retrieved from the database. As emphasized by (Kraus et al., 2020), the quality of a literature review often hinges on the reviewer's ability to conduct a thorough assessment. To enhance the quality of the findings, this review strictly includes journal articles only (Baashar et al., 2020). Moreover, only English-language documents were considered for inclusion to streamline the process and avoid complexities arising from translation requirements.

The year of publication was not a restriction for this study, despite many researchers using it as an exclusion criterion. The search results indicate that the publications were published between 2017 and 2022. The publication year was not an exclusion criterion. The inclusion and exclusion criteria for the selected article are summarized in Table 1.

Table 1: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Articles indexed in Scopus Scholarly articles published in journals Articles written in English	Articles not indexed in Scopus Proceedings from conferences, chapters from books, and books Articles written in languages other than English Study based on conceptual analysis

The authors manually evaluated the 1639 articles by perusing their titles, abstracts, and entire articles. 126 articles were eliminated due to duplication, and 983 abstracts were discarded due to screening. In addition, 413 articles were rejected after screening the complete text, and 102 articles were rejected after screening the full text for eligibility. Thus, 15 documents were deemed suitable for further analysis. Figure 1 depicts a comprehensive search process flowchart.

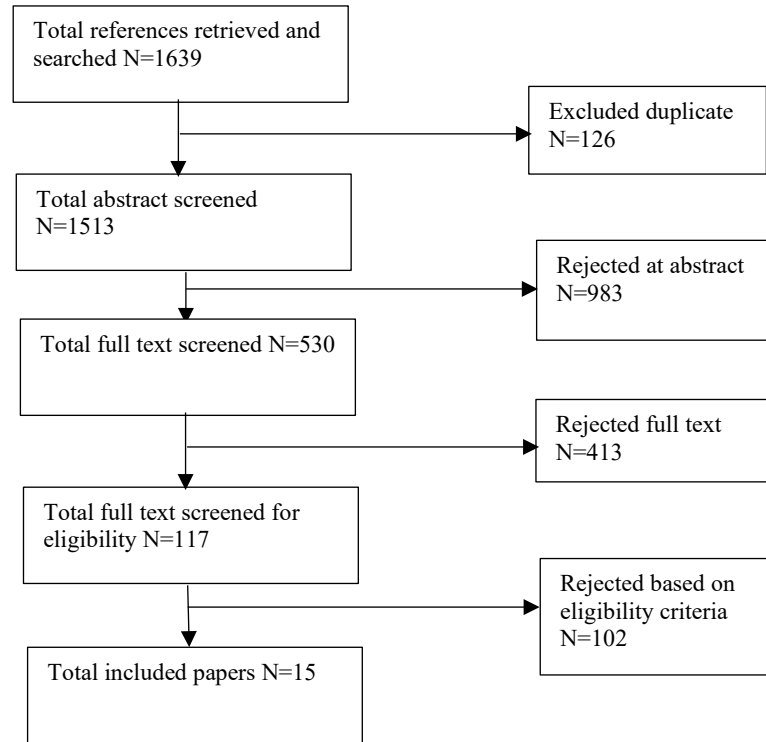


Fig. 1: selection and exclusion process.

3. Results and Discussion

This part discusses the Purpose, results, recommendations, and methodologies that were adopted in prior research on the effect of procurement on company performance.

Table 2: A review of the selected articles

Author	Purpose	Methodology	Results	Recommendation
(Changali ma et al., 2022)	To determine the relationship between supplier development and procurement performance in the public sector, accounting for the potential moderating effect of contract management difficulty.	questionnaire	The research findings revealed a significant and positive relationship between supplier development and public sector procurement performance. In addition, the study uncovered a significant and negative moderating effect of contract management difficulty on the association between supplier development and procurement performance.	Future studies could expand upon the present findings by incorporating multidimensional procurement performance indicators, thereby enhancing the comprehensiveness of the research outcomes.
(Mothupi et al., 2022)	Examine the factors impeding the implementation of the National Research Foundation of South Africa's procurement plan.	interviews	The study revealed that supply chain management administrators lack support and that supply chain management officials lack commitment to their work. In addition, the findings revealed a knowledge disparity between Scientists and supply chain management professionals.	Supply chain managers must meet with project managers to discuss the status of projects per the procurement plan and assist supply chain officials in carrying out their responsibilities, such as training scientists on SCM regulations.
(Ferreira & Silva, 2022)	To ascertain the existing criteria employed by small and medium-sized enterprises (SMEs) when selecting suppliers and identify emerging concerns associated with purchasing strategies.	Literature review	The study's findings indicate that strategic purchasing is a cornerstone for organizational development and competitiveness.	Future research should develop a conceptual model for supplier selection and a simulator that considers the decision model's weighted parameters.
(Hallikas et al., 2021)	To investigate the capabilities of digital procurement, with a specific focus on exploring the interrelationships between digital procurement capabilities, data analytics capabilities, and the operational performance of the supply chain.	Questionnaire	The findings indicated that digital procurement capabilities mediate the positive relationship between external data analytics capabilities and supply chain performance.	Due to the study's reliance on questionnaires alone to collect primary data on digital procurement and data analytics, additional research is required to adopt secondary data to measure these variables, reducing subjectivity's influence.

(Gambo & Musonda, 2021)	To examine the impact of a business partnership as a moderator on the relationship between procurement planning factors and the quality performance of primary healthcare building facilities.	Questionnaire	The study revealed that procurement planning factors significantly impacted the qualitative performance of primary healthcare building facilities, and the mediating effect of the firm's business partnerships was found to be supported.	The study suggests conducting additional research on the application of moderation effects to improve various aspects of project performance, including cost, time, and safety.
(Marnisah et al., 2021)	To assess the individual and simultaneous impact of competence, education, training, and employee placement on the performance of employees in the cement industry.	Questionnaire	The findings demonstrated that employee competence, education, training, and placement influence employee performance positively.	Effective performance can be achieved by providing technical training to improve e-Procurement division competence, followed by a careful reorganization of placement based on the suitability of individual competencies, expertise, and skills in carrying out the e-Procurement Standard Operating Procedure.
(Adesanya et al., 2020)	To investigate the impact of effective supplier management on the enhancement of tobacco manufacturers' sustainability performance.	Case study	The research findings indicated that effective collaboration between the procurement and other functional teams is vital in implementing sustainable supplier relationship management (SRM). The study provided compelling evidence of the successful integration of sustainability practices into the SRM processes.	Further study on sustainable supplier relationship management (SRM) should examine both the buyer's and the supplier's perspectives before including the entire supply chain.
(Skipworth et al., 2020)	To examine the effects of outsourcing on healthcare supply chains by comparing two distinct options: outsourcing from the public sector to the private sector and outsourcing within the public sector itself.	Case study	The study's findings show that both outsourcing options positively affect healthcare supply chains.	Future researchers must investigate the effects of outsourcing on healthcare supply chains for distinct populations to generalize the findings.
(Hawkins et al., 2020)	To identify the factors influencing supplier	Mixed method (Qualitative and	The study findings revealed that having a clear scope of work, conducting accurate supplier performance evaluations (SPE), and	Researchers have the opportunity to examine the motivating factors that lead evaluators to make tradeoffs and issue

	performance evaluations for risk mitigation.	Quantitative Methods)	documenting rating justifications have notable implications. However, the effectiveness of SPE in mitigating risks can be hindered by disagreements among performance evaluators and supplier disputes.	threats, specifically investigating the threshold of prospective gain that justifies such actions and the threshold that is deemed insufficient.
(Asha'ari & Daud, 2019)	To explore the impact of sustainable procurement on corporate sustainability performance, taking into consideration the moderating role of organizational age.	Questionnaire	The results suggest that organizations that engage in sustainable procurement practices are more likely to demonstrate better corporate sustainability performance.	As differences in industry contribute to the variation of results, future research can be conducted in other categories of manufacturing industries. Other manufacturing industries could be investigated using a similar methodology.
(Soh et al., 2019)	To examine the connections between the factors involved in selecting building maintenance management sourcing strategies and the performance measurements associated with these strategies.	Questionnaire	The findings indicated that quality factors, which constitute the most significant group of selection factors, and the ability to provide services with dependable and predictable outcomes are equally important performance indicators.	Additional investigation could be undertaken to explore methods of improving the sourcing strategy and its outcomes and develop a model for selecting the most appropriate sourcing strategy.
(Seo et al., 2018)	To examine the factors influencing vendor adoption of e-government services in developing nations.	Questionnaire	The results underlined those performance shortcomings: service convenience has a favorable impact on vendors' satisfaction whereas information, function, and system faults have a negative impact.	To confirm the validity of the study's empirical findings, further research is required to replicate the study in other developing nations.
(Landale et al., 2017)	To assess the influence of various supplier selection methods on significant procurement outcomes, such as procurement lead time (PLT), supplier performance, and the size of the purchasing team.	Secondary data	The tradeoff (TO) selection method increased the procurement lead time. In addition, larger procurement teams are associated with the TO source selection method. Nevertheless, findings indicated that Supplier performance was superior when the supplier was selected using the TO source selection method.	Future studies could examine how source selection affects financial performance and other facets of value, such as competitive advantage.
(Adediran &	To analyze the impact of government-focused	Questionnaire	The study revealed a robust and favourable association between government-targeted	It is advised to conduct more studies to ascertain the kinds of contractual

Windapo, 2017)	procurement strategies on the development potential of small and medium-sized contractors operating in the South African construction industry.		procurement policies and the growth performance of small and medium-sized contractors.	agreements SMCs establish with other organizations involved in the project supply chain and whether this affects their expansion and development.
(Saastamo inen et al., 2018)	To observe the association between inter-organizational networks and the innovative performance of small and medium-sized enterprises (SMEs).	Questionnaire	The study stated that the involvement of SMEs in inter-organizational networks is positively linked to their innovative performance.	In future research, there is a need to explore further the role of networks in the engagement of small and medium-sized enterprises (SMEs) in public innovation procurement.

Procurement is defined as the function of obtaining or sourcing goods and services (Hallikas et al., 2021). However, procurement is broader than this concept; some businesses have associated the function and the responsibility for procuring materials, supplies, and services with only purchasing. Furthermore, procurement involves several steps, such as identifying needs, sourcing, conducting market research, selecting suppliers, contracting, receiving product and/or service delivery, and monitoring and evaluating supplier performance (Schütz et al., 2019; Mothupi et al., 2022).

Companies strive for higher performance to maintain the competitiveness of the market. However, to improve performance, companies must be able to manage procurement activities efficiently and effectively. For this reason, the impact of effective procurement on organizational performance has been extensively studied in the literature. For example, Gambo & Musonda, (2021) pointed out that procurement planning impacted the quality performance of primary healthcare building facilities. Moreover, Cao & Wang, (2022) highlighted that procurement planning and supplier selection process management improve contract management performance. (Munyimi, 2019) adds that an increased procurement portfolio leads to improved performance. Ferreira & Silva, (2022) noted that procurement planning, procurement methods and procedures, subcontracting, supplier identification, supplier evaluation, and supplier selection influence the performance of the manufacturing industry. Procurement planning is crucial for both public and private sector organizations to operate effectively and efficiently. It provides a strong basis for resource management that is efficient. In order to achieve a smooth procurement process and dependable supplier sourcing, businesses should develop and implement an effective framework.

Risk management became essential due to the increase in outsourcing operations and relying on third-party service providers. Niu and Mu (2020), stated that risk management plays a significant role in influencing procurement performance within the oil and gas sector of the United Arab Emirates (UAE). The authors emphasize that various strategies, such as multiple sourcing, conducting feasibility studies, managing stakeholders, providing risk guarantees, evaluating risks, and implementing risk-sharing mechanisms, contribute to effectively managing procurement risks. These risks encompass financial and technological aspects, among others. According to Damayanti & Augustine, (2019) risk management has an effect on organizational performance. Risk structure, governance and process practices (Girangwa et al., 2020; Abdullahi & Mohamud, 2023) leadership, and organizational characteristics (risk-awareness culture) (Bals et al., 2019; Mwangike & Changalima, 2022). substantially influences organizational performance. Risk management is a process that involves identifying potential risks, evaluating and managing them. It requires greater attention from the board of directors, management, and all other members of the company to ensure the achievement of the desired organizational level of performance.

Electronic procurement plays a crucial role in company performance. According to (Masudin et al., 2021; Hossnofsky & Junge, 2019), adopting electronic procurement significantly affects organizational performance, so companies need to innovate and incorporate digital technologies into their business models. In addition, organizations must implement managerial policies that promote the adoption of electronic technology in procurement and enhance the capabilities of staff members to utilize e-procurement systems effectively. According to Ibrahim et al. (2023), adopting e-procurement has been found to impact supply chain performance and innovation positively. Similarly, Hallikas et al. (2021) conducted a study that revealed the positive influence of e-procurement on supply chain performance. The study also highlighted the substantial connections between digital procurement capabilities, data analytics capabilities, and supply chain performance. Furthermore, Salvi et al. (2021) found that digitalization positively affects firm value. However, it is important to note that the digitalization process can be costly in terms of time, investment, and required skills, as highlighted by Wamba et al. (2017).

Adesanya et al., (2020) revealed that sustainable supplier relationship management (SRM) and the procurement team's ability to work with other functional teams are critical to successfully implementing sustainable procurement and improving performance. Another study demonstrated that large businesses' effectiveness regarding sustainability varies throughout supply chain tiers and improves as it moves

closer to the final customer (Ghadge et al., 2019; Abdullahi et al., 2021). However, no significant difference is observed between the geographic regions of major corporations. This is due to the uniformity of law and the dynamic capacities of the global. In recent times, businesses have faced mounting demands from various stakeholders such as governments, customers, employees, competitors, non-governmental organizations, and the community to integrate economic, environmental, and social considerations into their operations and supply chains as a whole. Companies prioritising environmental, social, and governance (ESG) issues increasingly recognize that they can also achieve productivity and success (Xie et al., 2019).

Aulia & Isvara, (2022), concluded that procurement audits and top management commitment improve procurement quality performance. According to Anin et al., (2022), Best practices, executive support, mission, vision, procurement policies, standards, and record retention significantly affect organizational performance. Moreover, centralization and digitalization are considered critical factors in achieving good performance. Patrucco et al., (2021), revealed that a procurement strategy is necessary for the successful performance of the project. Similarly, Kabirifar & Mojtahedi, (2019), stated that an appropriate procurement strategy is essential for successful project performance.

As a result of the reviewed studies consistently highlight the positive relationship between efficient procurement practices and improved financial performance. Strategic sourcing, supplier collaboration, and effective contract management contribute to cost savings, inventory reduction, and enhanced financial outcomes. Additionally, procurement practices focused on quality management and supplier relationship development have positively impacted product quality and customer satisfaction, leading to improved market performance. Moreover, the integration of sustainability criteria into procurement decisions has emerged as a significant factor in enhancing corporate reputation, attracting socially conscious customers, and achieving long-term sustainability goals. Consequently, companies with robust procurement processes are better positioned to achieve superior performance and gain a competitive edge in dynamic business environments.

4. Conclusion

Procurement practices can impact the quality and reliability of inputs, directly influencing the performance of the final products or services. By selecting and collaborating with high-quality suppliers, organizations can enhance the quality of their offerings, strengthen their brand reputation, and ultimately drive customer satisfaction. Procurement practices that emphasize sustainability, ethical sourcing, and responsible supplier practices contribute to improved organizational performance by aligning with evolving societal expectations and addressing environmental concerns.

The study of the selected articles highlights that the challenge organizations face is the supplier landscape's complexity. With many potential suppliers, each offering diverse capabilities, reliability, and cost structures, identifying and engaging with the most suitable suppliers becomes a daunting task. This complexity often leads to difficulties in supplier selection, negotiation, and management, resulting in suboptimal procurement decisions that impact product quality, cost efficiency, and supply chain responsiveness.

Moreover, organizations encounter supply chain disruptions that further impede effective procurement and hinder overall performance. Globalization and interconnectedness expose organizations to various risks such as natural disasters, political instability, and raw material shortages. These disruptions can disrupt supply chains, causing supply shortages, delayed deliveries, and increased costs. Managing and mitigating these risks require proactive risk management strategies, robust contingency plans, and alternative sourcing options. Failure to address supply chain disruptions can have severe consequences, compromising the organization's ability to meet customer demands and negatively affecting its competitive position in the market.

The study establishes that the struggles organizations face in optimizing their procurement practices directly impact their overall performance. Inefficient procurement practices can result in increased costs,

delayed deliveries, and compromised product quality, leading to dissatisfied customers and loss of market share. Suboptimal supplier selection and management can also result in poor supplier performance, affecting the organization's ability to meet production targets and fulfill customer orders in a timely manner.

The study also exhibits that organizations grapple with various challenges in their procurement practices, which significantly impact their ability to perform effectively. Addressing these challenges by implementing strategies to streamline supplier selection, mitigate supply chain risks, and enhance transparency and data-driven decision-making can lead to improved procurement practices, resulting in enhanced organizational performance, cost efficiency, and customer satisfaction. In addition, effective procurement practices have a profound impact on organizational performance. Organizations can enhance their financial performance, customer satisfaction, and overall competitiveness by optimizing costs, improving operational efficiency, and ensuring product quality. Recognizing the critical role of procurement in driving performance outcomes, organizations can strategically align their procurement strategies, invest in supplier relationship management, and leverage technology to gain a competitive advantage in the marketplace. In addition, these findings demonstrate the need to develop a theory-based model that incorporates the primary factors required for the successful implementation of procurement to improve an organization's performance. These findings underscore the importance of addressing procurement practices as a critical factor in enhancing organizational performance. Overall, this study contributes to understanding the relationship between procurement practices and organizational performance. It highlights the benefits of effective procurement strategies and emphasizes the risks associated with suboptimal practices. By identifying gaps in the existing literature, this study also provides a foundation for future research to address these gaps and further advance knowledge in this field.

References

- Abdullahi, H. O., Hassan, A. A., Mahmud, M., & Ali, A. F. (2021). Determinants of ICT adoption among small scale agribusiness enterprises in somalia. *International Journal of Engineering Trends and Technology*, 69(2), 68–76. <https://doi.org/10.14445/22315381/IJETT-V69I2P210>
- Abdullahi, H. O., & Mohamud, I. H. (2023). The Impact of ICT on Supply Chain Management Efficiency and Effectiveness: A Literature Review. *Journal Européen Des Systèmes Automatisés*, 56(2), 309–315. <https://doi.org/10.18280/jesa.560216>
- Adediran, A., & Windapo, A. O. (2017). The influence of government targeted procurement strategies on the growth performance of construction small and medium-sized contractors (SMCs) in South Africa. *International Journal of Construction Supply Chain Management*, 7(3), 151–164. <https://doi.org/10.14424/ijcscm703017-151-164>
- Adesanya, A., Yang, B., Bin Iqdara, F. W., & Yang, Y. (2020). Improving sustainability performance through supplier relationship management in the tobacco industry. *Supply Chain Management*, 25(4), 413–426. <https://doi.org/10.1108/SCM-01-2018-0034>
- Ahmed, A. M., & Mohamed, A. A. (2023). Inbound, Outbound Disturbances and Supply Chain Vulnerability of Firms Operating in Post-conflict Zones: The Case of Somalia. *Journal of System and Management Sciences*, 13(3), 352–363. <https://doi.org/10.33168/JSMS.2023.0324>
- Mohamud, I. H., Kafi, A., Shahron, S. A., & Zainuddin, N. (2023). The Role of Warehouse Layout and Operations in Warehouse Efficiency: A Literature Review. *Journal Européen Des Systèmes Automatisés*, 56(1), 61–68. <https://doi.org/10.18280/jesa.560109>

Alryalat, S. A. S., Malkawi, L. W., & Momani, S. M. (2019). Comparing bibliometric analysis using pubmed, scopus, and web of science databases. *Journal of Visualized Experiments*, 2019(152). <https://doi.org/10.3791/58494>

Anin, E. K., Essuman, D., & Owusu, H. (2020). How does buyer-seller information sharing affect procurement quality performance? Insight from SMEs in a developing African economy. *International Journal of Quality and Service Sciences*, 13(1), 91–105. <https://doi.org/10.1108/IJQSS-03-2020-0046>

Asha'ari, M. J., & Daud, S. (2019). Sustainable procurement and corporate sustainability performance: The moderating role of organization age. *International Journal of Environmental Technology and Management*, 22(4–5), 330–351. <https://doi.org/10.1504/IJETM.2019.104762>

Aulia, D., & Isvara, W. (2022). The Importance of Procurement Organization, Policy, and Value on Supply Chain Performance. *ACM International Conference Proceeding Series*, 190–194. <https://doi.org/10.1145/3512676.3512708>

Baashar, Y., Alhussian, H., Patel, A., Alkaws, G., Alzahrani, A. I., Alfarraj, O., & Hayder, G. (2020). Customer relationship management systems (CRMS) in the healthcare environment: A systematic literature review. *Computer Standards and Interfaces*, 71(December 2019), 103442. <https://doi.org/10.1016/j.csi.2020.103442>

Bag, S., Dhamija, P., Gupta, S., & Sivarajah, U. (2021). Examining the role of procurement 4.0 towards remanufacturing operations and circular economy. *Production Planning and Control*, 32(16), 1368–1383. <https://doi.org/10.1080/09537287.2020.1817602>

Balaeva, O., Rodionova, Y., Yakovlev, A., & Tkachenko, A. (2021). Public procurement efficiency as perceived by market participants: The case of Russia. *International Journal of Public Administration*, 1–12. <https://doi.org/10.1080/01900692.2021.1964083>

Bals, L., Schulze, H., Kelly, S., & Stek, K. (2019). Purchasing and supply management (PSM) competencies: Current and future requirements. *Journal of Purchasing and Supply Management*, 25(5), 1–15. <https://doi.org/10.1016/j.pursup.2019.100572>

Basheka, B. C. (2021). Public Procurement Governance: Toward an Anti-corruption Framework for Public Procurement in Uganda. In N. Dorasamy & O. Fagbadebo (Eds.), *Public Procurement, Corruption and the Crisis of Governance in Africa* (1st ed., pp. 113–141). Cham: Palgrave Macmillan. https://link.springer.com/chapter/10.1007/978-3-030-63857-3_7

Cao, F., & Wang, C. (2022). An Empirical Study of Determinants of Pay-for-Performance in PPP Procurement. *Sustainability (Switzerland)*, 14(19). <https://doi.org/10.3390/su141912738>

Changalima, I. A., & Ismail, I. J. (2019). Analysis of the relationship between managerial competences and the performance of procurement management units in public sector: The structural equation modelling approach. *The International Journal of Business & Management*, 7(4), 155–161. <https://doi.org/10.24940/theijbm/2019/v7/i4/bm1904-039>

Changalima, I. A., Mchopa, A. D., & Ismail, I. J. (2022). Supplier development and public procurement performance: Does contract management difficulty matter? *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2108224>

Changalima, I. A., Mushi, G. O., & Mwiseje, S. S. (2021). Procurement planning as a strategic tool for public procurement effectiveness: Experience from selected public procuring entities in Dodoma city, Tanzania. *Journal of Public Procurement*, 21(1), 37–52. <https://doi.org/10.1108/JOPP-05-2020-0047>

Changalima, I. A., Mwiseje, S. S., Mchopa, A. D., & Panga, F. P. (2022c). Challenges facing procurement and supply professions in Tanzania: Higher education students' perceptions. *Journal of Applied Research in Higher Education*, ahead-of-print. <https://doi.org/10.1108/JARHE-06-2022-0189>

- Damayanti, A., & Augustine, Y. (2019). The Effect of Management Accounting Systems and Enterprise Risk Management to Organizational Performance with a Competitive Advantage as an Intervening Variable. 11(12). <https://doi.org/10.7176/EJBM>
- Essuman, D., Anin, E. K., & Muntaka, A. S. (2021). Does purchasing recognition help or hinder purchasing quality performance in developing market SMEs? Effects of resource conditions. *Journal of Purchasing and Supply Management*. Advance online publication. <https://doi.org/10.1016/j.pursup.2021.100717>
- Ferreira, A. C., & Silva, Â. (2022). Supplier selection and procurement in SMEs: Insights from the literature on key criteria and purchasing strategies. *Engineering Management in Production and Services*, 14(4), 47–60. <https://doi.org/10.2478/emj-2022-0030>
- Gambo, N., & Musonda, I. (2021). Procurement planning factors influencing the quality performance of primary healthcare building facilities: A mediation effect of the firm's business partnership. *Cogent Engineering*, 8(1). <https://doi.org/10.1080/23311916.2021.1872823>
- Ghadge, A., Kidd, E., Bhattacharjee, A., & Tiwari, M. K. (2019). Sustainable procurement performance of large enterprises across supply chain tiers and geographic regions. *International Journal of Production Research*, 57(3), 764–778. <https://doi.org/10.1080/00207543.2018.1482431>
- Girangwa, K. G., Rono, L., & Mose, J. (2020). The Influence of Enterprise Risk Management Practices on Organizational Performance: Evidence from Kenyan State Corporations. *Journal of Accounting, Business and Finance Research*, 8(1), 11–20. <https://doi.org/10.20448/2002.81.11.20>
- Hallikas, J., Immonen, M., & Brax, S. (2021). Digitalizing procurement: the impact of data analytics on supply chain performance. *Supply Chain Management*, 26(5), 629–646. <https://doi.org/10.1108/SCM-05-2020-0201>
- Hawkins, T. G., Gravier, M. J., & Muir, W. A. (2020). The role of supplier performance evaluations in mitigating risk: Assessing evaluation processes and behaviors. *Industrial Marketing Management*, 87(July 2019), 2–17. <https://doi.org/10.1016/j.indmarman.2020.03.004>
- Hossnofsky, V., & Junge, S. (2019). Does the market reward digitalization efforts? Evidence from securities analysts' investment recommendations. *Journal of Business Economics*, 89(8–9), 965–994. <https://doi.org/10.1007/s11573-019-00949-y>
- Hui, W. S., Othman, R., Omar, N. H., Rahman, R. A., & Haron, N. H. (2011). Procurement issues in Malaysia. *International Journal of Public Sector Management*, 24(6), 567–593. <https://doi.org/10.1108/09513551111163666>
- Ibrahim, M., Bawole, J. N., Obuobisa-Darko, T., Abubakar, A.- B., & Kumasey, A. S. (2017). The legal regime and the compliance façade in public procurement in Ghana. *International Journal of Public Sector Management*, 30(4), 370–390. <https://doi.org/10.1108/IJPSM-09-2016-0156>
- Israel, B., Mchopa, A. D., Mwaiseje, S., & Mashene, A. (2019). Ethical procurement practices and performance of public procuring entities in Tanzania: Empirical evidences from moshi district council. *Journal of Co-Operative and Business Studies*, 4(2), 39–47.
- Kabirifar, K., & Mojtahedi, M. (2019). The impact of Engineering, Procurement and Construction (EPC) phases on project performance: A case of large-scale residential construction project. *Buildings*, 9(1). <https://doi.org/10.3390/buildings9010015>
- Knight, A.K., Blessner, P., Olson, B.A. and Blackburn, T.D. (2017), "Strategic sourcing and corporate social responsibility: aligning a healthcare organization's strategic objective", *Journal of Purchasing and Supply Management*, Vol. 23 No. 2, pp. 1-11, doi: 10.1016/j.pursup.2017.01.002.

- Kraus, S., Breier, M., & Dasí-Rodríguez, S. (2020). The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship and Management Journal*, 16(3), 1023–1042. <https://doi.org/10.1007/s11365-020-00635-4>
- Lacity, M., & Willcocks, L. (2017). Conflict resolution in business services outsourcing relationships. *Journal of Strategic Information Systems*, 26(2), 80–100. <https://doi.org/10.1016/j.jsis.2017.02.003>
- Landale, K. A. F., Rendon, R. G., & Hawkins, T. G. (2017). Examining the effects of source selection method on procurement outcomes. *Journal of Defense Analytics and Logistics*, 1(1), 47–68. <https://doi.org/10.1108/JDAL-05-2017-0006>
- Marnisah, L., Zamzam, F., Handayani, S., Yustini, T., Wijaya, H., Maris, H., & Irwanto, D. (2021). Factors affecting e-procurement division employee performance. *International Journal of Data and Network Science*, 5(1), 19–24. <https://doi.org/10.5267/j.ijdns.2020.11.007>
- Masudin, I., Aprilia, G. D., Nugraha, A., & Restuputri, D. P. (2021). Impact of E-Procurement Adoption on Company Performance: Evidence from Indonesian Manufacturing Industry. *Logistics*, 5(1). <https://doi.org/10.3390/logistics5010016>
- Mchopa, A. D. (2020). Applicability of force account approach in procurement of works in Tanzania. *Journal of International Trade, Logistics and Law*, 6 (2), 137–143.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Physical Therapy*, 89(9), 873–880.
- Mothupi, T. F., Mukonza, R. M., & Khalo, T. (2022). Factors hindering the implementation of the procurement plan in a selected national research utility. *Journal of Transport and Supply Chain Management*, 16, 1–11. <https://doi.org/10.4102/jtscm.v16i0.644>
- Munyimi, T. F. (2019). The role of procurement specifications in curbing wrong deliveries of construction materials in the construction sector in Zimbabwe. *Cogent Engineering*, 6(1). <https://doi.org/10.1080/23311916.2019.1631542>
- Mwagike, L. R., & Changalima, I. A. (2022). Procurement professionals' perceptions of skills and attributes of procurement negotiators: A cross-sectional survey in Tanzania. *International Journal of Public Sector Management*, 35(1), 94–109. <https://doi.org/10.1108/IJPSM-12-2020-0331>
- Niu, B., & Mu, Z. (2020). Sustainable efforts, procurement outsourcing, and channel co-opetition in emerging markets. *Transportation Research Part E: Logistics and Transportation Review*, 138(December 2019), 101960. <https://doi.org/10.1016/j.tre.2020.101960>
- Odongo, K. O., & Kazungu, I. (2022). ICT infrastructure and adoption of strategic procurement performance metrics in the Kakamega County Government, Kenya. *LWATI: A Journal of Contemporary Research*, 19(1), 196–214. <https://www.ajol.info/index.php/lwati/article/view/224223>
- Patel, A. K., Singh, M., Singh, K., Patel, A. K., & Varma, A. K. (2021). Visualizing publication trends in webology journal: a bibliometric review based on the scopus database (2006-2020). *Library Philosophy and Practice*, 2021(August), 1–24.
- Patrucco, A. S., Luzzini, D., & Ronchi, S. (2016). Evaluating the effectiveness of public procurement performance management systems in local governments. *Local Government Studies*, 42(5), 739–761. <https://doi.org/10.1080/03003930.2016.1181059>
- Patrucco, A. S., Walker, H., Luzzini, D., & Ronchi, S. (2019). Which shape fits best? Designing the organizational form of local government procurement. *Journal of Purchasing and Supply Management*, 25(3), 100504. <https://doi.org/10.1016/j.pursup.2018.06.003>

- Patrucco, A. S., Agasisti, T., & Glas, A. H. (2021). Structuring Public Procurement in Local Governments: The Effect of Centralization, Standardization and Digitalization on Performance. *Public Performance and Management Review*, 44(3), 630–656. <https://doi.org/10.1080/15309576.2020.1851267>
- Pettersen, I. J., Nyland, K., & Robbins, G. (2020). Public procurement performance and the challenge of service complexity – the case of pre-hospital healthcare. *Journal of Public Procurement*, 20(4), 403–421. <https://doi.org/10.1108/JOPP-01-2020-0002>
- Prier, E., McCue, C. P., & Csáki, C. (2021). Evaluating Decision Speed as a Measure of Public Procurement Performance in the European Single Market. *International Journal of Public Administration*, 44(13), 1065–1075. <https://doi.org/10.1080/01900692.2020.1773497>
- Rosa, A. C. M., & Broday, E. E. (2018). Comparative Analysis Between The Industrial and Service Sectors : A Literature Review of The Improvements Obtained Through The Application Of Lean Six Sigma. *International Journal for Quality Research*, 12(1), 227–252.
- Saastamoinen, J., Reijonen, H., & Tammi, T. (2018). Should SMEs pursue public procurement to improve innovative performance? *Technovation*, 69(October 2017), 2–14. <https://doi.org/10.1016/j.technovation.2017.10.003>
- Sabet, D. M. (2020). Auditing as a tool of government account- ability? Exploring divergent causal mechanisms through three Honduran cases. *Public Administration and Development*, 40(4), 209–219. <https://doi.org/10.1002/pad.1895>
- Salvi, A., Vitolla, F., Rubino, M., Giakoumelou, A., & Raimo, N. (2021). Online information on digitalization processes and its impact on firm value. *Journal of Business Research*, 124(June), 437–444. <https://doi.org/10.1016/j.jbusres.2020.10.025>
- Schütz, K., Kässer, M., Blome, C. and Foerstl, K. (2019), "How to achieve cost savings and strategic performance in purchasing simultaneously: a knowledge-based vie", *Journal of Purchasing and Supply Management*, Vol. 26 No. 2, doi: 10.1016/j.pursup.2019.04.002.
- Seo, D. B., Tan, C. W., & Warman, G. (2018). Vendor satisfaction of E-government procurement systems in developing countries: an empirical research in Indonesia. *Information Technology for Development*, 24(3), 554–581. <https://doi.org/10.1080/02681102.2018.1454878>
- Skipworth, H., Delbufalo, E., & Mena, C. (2020). Logistics and procurement outsourcing in the healthcare sector: A comparative analysis. *European Management Journal*, 38(3), 518–532. <https://doi.org/10.1016/j.emj.2020.04.002>
- Soh, K. Y., Chua, S. J. L., Ali, A. S., Au-Yong, C. P., & Alias, A. (2019). Relationship between building maintenance sourcing strategy selection factors and performance. *Journal of Facilities Management*, 17(2), 157–174. <https://doi.org/10.1108/JFM-04-2018-0026>
- Sulaiman, N. S., Fauzi, M. A., Wider, W., Rajadurai, J., Hussain, S., & Harun, S. A. (2022). Cyber–Information Security Compliance and Violation Behaviour in Organisations: A Systematic Review. *Social Sciences*, 11(9). <https://doi.org/10.3390/socsci11090386>
- Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. fan, Dubey, R., & Childe, S. J. (2017). Big data analytics and firm performance: Effects of dynamic capabilities. *Journal of Business Research*, 70, 356–365. <https://doi.org/10.1016/j.jbusres.2016.08.009>
- Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, 28(2), 286–300. <https://doi.org/10.1002/bse.2224>

Yeung, K., Cheng, T. C. E., & Lee, P. K. (2015). Buyers' perceptions on the impact of strategic purchasing on dyadic quality performances. *International Journal of Production Economics*, 168, 321–330. <https://doi.org/10.1016/j.ijpe.2015.07.005>

Zhu, J., & Liu, W. (2020). A tale of two databases: The use of web of science and scopus in academic papers. *Scientometrics*, 123(1), 321–335. <https://doi.org/10.1007/s11192-020-03387-8>