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Sustainable Supply Chain Management Practices on Procurement Performance: A Review of Literature

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Abstract:

The chosen topic combines social, economic and environmental practices into its system to reduce the impact of ecological activities and encourage outcomes which are socially friendly. The study looked at the effects of sustainable supply chain management practices on procurement performance and factored in the following specific objectives: waste reduction, quality, lead time and customer service. This study was harbored on resource-based theory. The study focused on using a literature review through sampling journals, presented data, and analyzed them appropriately. The study found that waste reduction, quality, lead time and customer service have a profound influence on the chosen study. It is, therefore, confirmed that waste reduction, quality, lead time and customer service are necessary for a workable procurement performance in an organization. The study, therefore, recommended further studies using different design methods to compare the measurement.

Keywords: Waste reduction, lead time, quality, customer service

1. Introduction

Sustainable supply chain management is about incorporating friendly, efficient and effective environmental aspects in its mandate of transferring goods from one point to another using recommended sustainable materials, which focuses on waste reduction and pollution control (Saeed & Kersten, 2019). Sustainable supply chain practices cut across management disciplines in the environment and social and economic impacts by incorporating better governance in the normal cycles of life of goods and services (Omweri & Ndolo, 2021). While the 21st century has experienced paradigm changes due to climate change and recession, one cannot ignore the environmental aspects due to cultural, economic and societal requirements (Pasquali et al., 2021). The focus has narrowed down to sustainable practices cutting across since they are measurable and have a big impact on the performance of an organization (Yildiz Çankaya & Sezen, 2019). While many researchers have done research on sustainable supply chains, it is paramount to come up with comprehensive research to ascertain the dependence of a successful system to improve procurement performance (Gioia, 2020).

There have been rapid changes in this century, cutting across different platforms. According to Shrestha (2021), these changes have been brought about by changes occasioned by climate change, putting a lot of organizations on the need to embrace environmentally friendly materials and control waste. They have not only focused on the main pillars of a sustainable supply chain, but they have also included major indicators of waste reduction, lead time, quality, and customer service (Saeed & Kersten, 2019). These organizations have gone further by embracing policies where protection and accountability are sought through regulators in their respective governments.

Kamoni's (2020) study suggested the importance of reviewing the procurement chain process through enhancement of the department mechanism to enable data collection in the evaluation process. Ahmed et al. (2018) concluded by giving recommendations on policy and regulatory dimensions of a sustainable platform. The study gave insight into the value that will help policy-makers achieve the objective of sustainable supply chain practices.

More evidence is given by Tay et al. (2015) on sustainability supply chain practices. The study discovered that challenges faced by both regions in the USA and Africa, such as regulatory frameworks, infrastructure limitations and the need for capacity building, must be considered in the successful implementation of a sustainable supply chain practice. The study further observed that there was growing recognition of sustainability as a critical business imperative and a shift due to innovations on the global platform. Tsoulfas and Pappis (2006) confirmed that by incorporating environmental and sustainable principles into their supply chain practices, organizations can not only enhance their environmental performance but also achieve long-term financial and operational sustainability.

The local market has embraced sustainable supply chain practices to align with the climate change agenda to conserve the environment and contain the threats to global socio-economic development and societal requirements, Climate Risk Profile. Organizations such as the Kenya Institute of Supplies Management have encouraged corporate members to enlighten their customers to embrace sustainable supply chain practices to improve performance through various training documented in their training. While working on their study on drivers of Sustainable Supply Chain

Management Performance, Saeed and Kersten (2019) recommended a keen focus on sustainable supply chain practice in business set-ups.

1.1. Supply Chain Management Practices

The study concept implications work with the structure of an organization's procurement, regardless of their areas of specialization; the concept is similar, cutting across where an organization's supply chain practices evolve around the triple bottom line approach (Khanam & Ghosh, 2022). Embracing sustainable supply chain practices is the new way of operating because it helps companies address environmental issues and benefits economic and social circles. Sustainable practices include measures to protect the organization's resources and foreseen risks with the particular intention of growth while encouraging eco-friendly productions.

1.2. Problem Statement

Sustainable supply chain practices multitask different responsibilities, which significantly contribute to the well-being of the organization (Saeed & Kersten, 2019). While many organizations have outsourced some practices, research has confirmed that it is important to have all the practices within the organization for better controls and accountability. Khanam & Ghosh's (2022) study confirmed a good connection in chosen variables to some extent. This exclusion calls for future exploration of research on procurement performance.

Zhou et al. (2024) suggested that managers should develop and implement sustainable supply chain practices to improve business performance. Abuzawida et al. (2023) asserted that firms need to implement systems to help them use assets more efficiently and incorporate innovations for organizational prospects. Gatari (2023) alluded that the indicators of focus have combined positively and significantly influenced the organization.

Liu et al. (2013) looked at sustainable service supply chain management from a systematic literature review to a conceptual framework perspective for performance evaluation of service on the supply chain. His research recommended future exploration of sustainable supply chain practices from different perspectives. Based on the literature gaps, it is evident that there is a knowledge inequality between sustainable supply chain management practices and procurement performance in the market, cutting across different sectors, thus making this research a call for this research.

1.3. Research Objectives

The main objective was to assess the effects of sustainable supply chain management practices on procurement performance and a review of the literature.

1.3.1. Specific Objectives

- To examine the effects of waste reduction on procurement performance, a review of literature.
- To investigate the effects of lead time on procurement performance, a review of literature.
- To determine the effects of quality on procurement performance, a review of literature.
- To establish the effects of customer service on procurement performance, a review of literature.

1.4. Theoretical Framework

The theoretical framework is a formation that includes a theory of a research study. The theoretical framework encompasses not just the theory but a detailed explanation of how the study engages in using the theory and its underlying belief to investigate the research problem at hand (Hirose & Creswell, 2023). Theoretical review is important for bringing out the current state of knowledge in the field of study, giving insights into empirical research, and developing a new theoretical framework.

1.4.1. Resource-Based Theory

This theory is a managerial framework used to dictate the strategic pool an organization can put in use to achieve sustainable competitive leadership, incorporating challenges expected and action to counter them. Agyapong (2019) alluded that sustainable competitive advantage is obtained from engaging an organization's unusual resources, which are the dependents of an organization's success in terms of realizing its objectives. In his study on sustainable green practices and performances on food beverage processing in Kenya, he further asserted that an organization's resources could be in several forms, i.e. tangible and intangible, to contribute to an organization's transformation and output.

The theory further suggests that a firm obtains abilities and, consequently, competitive advantage and favourable results out of merging and using its available resources to improve its output (Agyapong & Attram, 2019). Resource-based theory, therefore, divides its resources into different classes depending on their nature. According to resource-based theory, organizations can thus be seen to derive competitive advantage out of certain situations, i.e. a set of skills or capabilities or even behaviour which can be incorporated into the system to achieve better results. Ominde (2024) alluded that many firms that embrace e-commerce to conduct supply chain practices achieve success in eradicating outdated applications and introducing new working ideas in their bid to better output. Sustainable procurement practices are a major deal in this century since the policies are anchored in governing bodies which determine the economic, social and environmental success of any region.

1.5. Conceptual Framework

Conceptual framework is a structure which outlines possible courses of action or to present a preferred approach to an idea (J. M. Wambugu & Nairobi, n.d.). Sustainable supply chain management practices have been anchored in the

three pillars of economic, social, and environmental practices; this study has further broken them down from a different perspective. The sustainable supply chain management practices under consideration are: waste reduction, quality, lead-time, and customer service. The dependent variable is Performance, which will be measured among indicators of profits, costs, rewards and recognition.

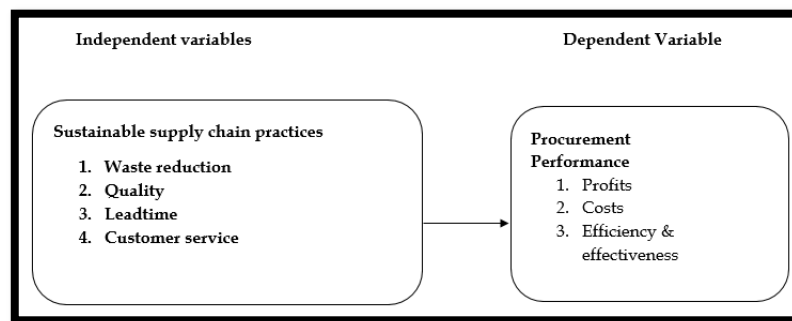


Figure 1: Conceptual Framework

2. Literature Review

2.1. Waste Reduction

Waste reduction involves minimizing the amount of waste generated and managing it more efficiently through recycling, reusing and repurposing. Through repurposing, one must choose the right products with minimal packages, buying in bulk to enjoy economies of scale and incorporating innovations. Recycling will, in turn, sort and recycle materials to ensure processing is done promptly and used to make new products. Organizations are also encouraged to opt for reusable items to save costs. The Policy further outlines the most important aspects of managing waste in this Country, focusing on the social, environmental and economic aspects and endorses sustainable waste management as a critical indicator to delivering on Kenya's constitutional right of the citizens in also realizing the blue and circular economy and vision 2030.

2.1.1. Quality

Quality management is about bringing different aspects of activities to control and giving directions regarding quality (Yildiz Çankaya & Sezen, 2019). It includes quality assurance, which focuses on providing confidence that quality requirements are met within the set targets, and quality improvements through continuous improvement to improve the whole chain (Shrestha, 2021). As a degree of excellence of something bringing out its significance, it can be used in an organization to gain the confidence of customers in the market through improving products. It brings out the best and the worst conditions of a product or a service in a manner which is unquestionable (Ominde, 2024).

2.1.2. Lead Time

Lead time is the total amount of time it takes from the time an order is initiated to the time the process is completed and ready for use (Liu et al., 2013). Lead time is important for planning schedules and improving the efficiency of business. This can eventually lead to an improvement in productivity and customer satisfaction. Wahyuni's (2024) study on Sustainable Supply Chain Management Practices in the Dairy Industry: A Comparative Study of Leading Dairy Firms and Future Research Directives gives the paradigm shift from a traditional supply chain to improve lead time and retain the market share (Saeed & Kersten, 2019).

2.1.3. Customer Service

Customer service involves interaction between customers and the companies throughout the entire purchasing and post-purchase process. It is crucial for building trust and ensuring that customer satisfaction questions about service are addressed accordingly. It involves addressing customer inquiries, resolving issues and creating a responsive system (Pasquali et al., 2021). Agyapong and Attram (2019) asserted that for a successful business, customer satisfaction is the main area of focus, which calls for good customer service every time they visit your business set-up.

2.1.4. Procurement Performance

An organization's performance describes in detail how the chosen strategy is going to help the organization achieve the set targets. An organization's different functions set up measures that take different ways depending on which aspect of performance is under focus. Chakraborty (2019) emphasized the importance of innovation for an organization's success and enhanced achievements. The motive of this study is to investigate sustainable supply chain practices on procurement performance.

3. Research Methodology

The study will use an analysis methodology, which can be summarized into five stages as depicted in the fig. 2 below:

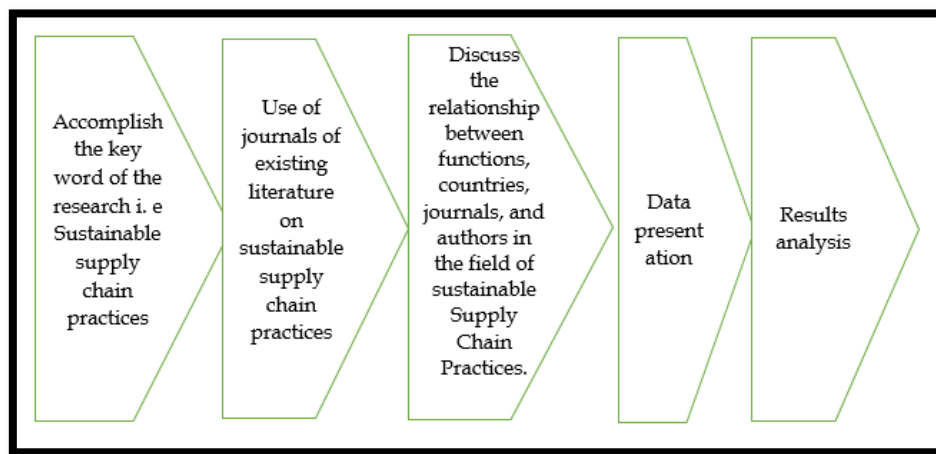


Figure 2: Analysis Methodology

3.1. Research Design

Research design is a structured framework for conducting a research study (Wambugu & Nairobi, 2022). It outlines how data was reviewed, analyzed and interpreted to answer specific questions as demonstrated above. A review of the literature and a cross-sectional survey were adopted. This is due to the fact that it is heterogeneous in nature but homogenous in location. The survey was based on a single examination of the population at one point in time to ensure the accuracy of the results. In this particular study, the researcher used sustainable supply chain practices journals. This confirmed the high reliability due to the clarity of data in the existing journals.

4. Research Findings

A total of thirty-seven research journals were reviewed based on the study findings were discussed as illustrated below.

4.1. Findings on Waste Reduction

The relevant journals showed that there is a unique relationship between the reduction of waste and procurement performance due to societal demand to dispose of waste from organizations. To conserve the environment, waste reduction has been embraced by recycling of materials and reuse of materials (Pasquali et al., 2021). A study by Strandhagen et al. (2017) confirmed that recycling has become a major contributor to the realization of the climate change requirement due to its contribution, especially in the manufacturing industries.

4.2. Findings on Quality

The literature reviewed confirmed that there was a relationship between quality and procurement performance. In a study by Saeed and Kersten (2019), the findings confirmed that there is a relationship between quality assurance, improvement, and controls that eventually impact procurement performance in an organization. Sheng et al. (2019) alluded that today, most firms have set standards by incorporating quality to get value for money spent.

4.3. Findings on Lead Time

The reviewed journals confirmed that there is an improvement in the adoption of the lead time, thus indicating a positive relationship between procurement performances. A study by Saeedan and Kersten (2019) confirmed that the duration between the time a product or service is ordered and the time that the product or service is delivered has a major impact on procurement performance since it improves the cycle of and realization of set objectives and goals. L. Wambugu & Njoroge (2022) asserted that today, the new technologies in the market, like Just in Time, have embraced the lead time concept since they are able to measure performance.

4.4. Findings on Customer Service

The literature reviewed confirmed that customer service has a positive relation with procurement performance, making it a crucial indicator in measuring performance Panya. Customer service is the support given by an organization to its customers before, during and after they have made their purchases or used the products and services (Yildiz Çankaya & Sezen, 2019). Even though some organizations have not focused on empowering their employees when it comes to customer service, it is time for them to focus on improved services.

4.5. Findings on Procurement Performance

The reviewed journals confirmed that the procurement performance mirrors the three aspects of research, i.e. effectiveness, efficiency, costs and profits. Panya et al. (2021) state that these aspects are extremely important in realizing the set goals and objectives. Since they are measurable, an organization can set targets based on their areas of specialization and good results.

5. Conclusions, Recommendations and Future Research

5.1. Conclusions

There were four study objectives, and the conclusion is based on them. In reference to the study objectives, the conclusions were based on each objective.

The first study objective was to examine the effects of waste reduction on sustainable supply chain practice procurement performance. The literature review confirmed a positive effect of waste reduction on procurement performance on the profits, cost, efficiency, and effectiveness of procurement discipline in an organization. The research question was based on whether waste reduction affects procurement performance; therefore, it was concluded that waste reduction has a positive effect on procurement discipline in an organization.

The second objective was to investigate the effect of quality on procurement performance. A review of the literature showed a positive effect on procurement performance. The research question was based on whether quality affects procurement performance using a review of the literature. The results indicated that quality has a positive influence on procurement performance.

The third objective of the study was to determine the effects of lead time on procurement performance based on the literature reviewed. The research sought to answer the research question of how lead time impacted procurement performance. It was concluded that lead time has a significant positive effect on procurement performance.

The fourth objective of the study was to establish the significant effects of customer service on procurement performance based on the literature reviewed. The research wished to seek the research question of how customer service impacts procurement performance. It was concluded that lead time significantly affects procurement performance.

5.2. Recommendations

Based on the chosen study objectives, the recommendations cut across four areas of core interest to the study. The first study objective was waste reduction, which was confirmed to have a positive influence on procurement performance. It is, therefore, important that organizations adopt ways to recycle and reuse their products for significant procurement performance that will benefit the whole organization.

The second recommendation was quality, which is a unique item in procurement performance since it measures the value of money. Research confirmed that through quality assurance, continuous improvement and controls the overall performance of the entire chain will be improved since the procurement function facilitates the other functions. It is, therefore, paramount for organizations to incorporate quality in their process for improved procurement performance and realize its goals and objectives.

The third objective was lead time. The reviewed literature confirmed that lead time is crucial to procurement performance. This is so based on the requirement it has when it comes to placed orders and deliveries. The paradigm shift in the global market from a traditional supply chain to a sustainable supply chain process not only places lead time as an option for better results but also requires the concept of efficient and effective services. For better results, organizations should incorporate lead time in their processes.

The study found a positive effect of customer service on the procurement performance of organizations. The literature review sought to answer whether there was a relationship between the two, which proved to be significant. It is, therefore, important that organizations adopt customer service in their procurement processes to ensure improved performance, which will be reflected in the entire organization's performance.

5.3. Future Research

The finding, therefore, recommends a further study to consider the same variables, i.e. waste reduction, quality, lead time, and customer service, in different areas of study to compare the results. It is important to note that this study only conducted on a review of literature, future study can be done using other research designs for comparison.

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