The Effect of Sustainable Procurement Practices on Organizational Performance: A Study of Selected Manufacturing Companies in Nigeria

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Abstract- This study aimed to explore the effect of sustainable procurement practices the organizational performance selected manufacturing companies in Nigeria. The research arose from the need to understand how sustainability initiatives in procurement could impact key performance metrics such as financial outcomes, operational efficiency, competitiveness, customer satisfaction, reduction, and corporate reputation. The study covered manufacturing firms such as Nestlé, Dangote Cement, Nigerian Breweries, and others, providing a comprehensive view of the manufacturing sector's approach to sustainability. Findings reveal that sustainable procurement practices have a significant positive impact on the financial performance of manufacturing companies. Cost reductions, increased revenue, and improved profitability were attributed to better supplier negotiations, enhanced marketability, and long-term cost savings. Operational efficiency was also positively affected, with streamlined processes and improved supply chain coordination due to sustainable sourcing. Companies noted that time management and supplier consistency have improved, leading to reduced delays and fewer disruptions. Additionally, sustainable procurement helped companies achieve differentiation, attracting new clients and enhancing long-term competitiveness. Regarding customer satisfaction and loyalty, sustainable procurement was found to foster trust and longterm relationships with customers. Positive feedback regarding sustainability initiatives has led to greater customer retention and loyalty. Furthermore, waste reduction and resource management have seen notable improvements, as companies now manage raw materials more efficiently and minimize waste through eco-

friendly sourcing. This has also contributed to a reduction in their environmental footprint and enhanced corporate social responsibility (CSR) efforts. In terms of corporate reputation, the adoption of sustainable procurement has positioned companies as responsible corporate citizens, enhancing their brand image. The study concluded that these practices are essential not only for improving financial and operational performance but also for gaining a competitive edge in the market and ensuring customer loyalty. Sustainable procurement is, therefore, a key driver for long-term success and market relevance. The study recommends that manufacturing companies continue to integrate these practices into their operations, and that policy makers' support such efforts through regulatory frameworks and incentives.

Index Terms- Competitiveness, Organizational Performance, Procurement, Sustainability, Sustainable Procurement

I. INTRODUCTION

Sustainable procurement is an evolving approach that integrates environmental, social, and economic considerations into purchasing decisions to ensure long-term value creation. It moves beyond traditional procurement, which focuses primarily on cost and quality, by incorporating broader concerns such as reducing carbon emissions, conserving natural resources, promoting fair labor practices, and supporting economic stability (Sönnichsen & Clement, 2020). This shift is driven by the increasing recognition that businesses play a critical role in addressing global challenges, such as climate change, inequality, and resource depletion. The adoption of sustainable procurement practices aligns

with frameworks such as the United Nations Sustainable Development Goals (SDGs), particularly Goal 12, which emphasizes responsible consumption and production (United Nations, 2015). Developed nations and multinational corporations have led the way, implementing robust sustainability policies and practices. Examples include Walmart's supplier sustainability index and the European Union's Green Public Procurement initiative, which have demonstrated tangible benefits, including cost savings, enhanced corporate reputation, and improved operational efficiency (Yadav & Veettil, 2022).

In Nigeria, the adoption of sustainable procurement practices is still at a developmental stage despite its potential to address critical issues in the manufacturing sector. As one of Africa's largest economies, Nigeria's manufacturing industry is central to its economic growth, contributing significantly to employment and gross domestic product (GDP) (National Bureau of Statistics, 2020). However, this sector faces persistent challenges such as resource inefficiency, environmental degradation, and dependence on imported raw materials. Manufacturing processes are often energy-intensive and generate substantial waste, making sustainability a vital consideration for improving industry performance. While some leading firms such as Dangote Cement, Nestlé Nigeria, and Nigerian Breweries have started integrating sustainability into their operations, these efforts are largely fragmented and insufficient to create widespread impact. Moreover, the lack of an enabling regulatory environment, weak enforcement of environmental laws, and limited supplier capacity for sustainable materials exacerbate the issue.

Sustainable procurement has the potential to transform Nigeria's manufacturing sector by addressing inefficiencies, reducing environmental impacts, and enhancing market opportunities. Companies that adopt sustainability initiatives can benefit from cost savings through energy efficiency, improved resource utilization, and waste reduction. Additionally, aligning procurement practices with sustainability goals can help firms differentiate themselves in increasingly competitive markets. Customers and investors are now prioritizing businesses that demonstrate a commitment to corporate social responsibility, making sustainability a strategic imperative rather than a

discretionary choice (Truant et al., 2023). Moreover, sustainable procurement supports long-term organizational resilience by mitigating risks associated with supply chain disruptions, regulatory changes, and reputational damage. For Nigerian manufacturers, leveraging these benefits requires overcoming existing barriers and fostering collaboration among stakeholders to create an enabling environment for sustainability.

Despite growing awareness of sustainability's importance, Nigerian manufacturers continue to face significant barriers to adopting sustainable procurement practices. One of the primary obstacles is the high initial cost of implementing sustainable initiatives, such as investing in eco-friendly technologies and developing sustainable supply chains (Ogunsanya et al., 2022). Small and mediumsized enterprises (SMEs), which form a substantial part of the manufacturing sector, often lack the financial resources to prioritize sustainability over short-term profitability. Furthermore, the limited availability of local suppliers who sustainability criteria increases procurement costs and complicates supply chain operations. Another challenge is the weak enforcement of existing environmental regulations, which allows firms to bypass sustainability standards without significant consequences. This regulatory gap, coupled with insufficient expertise among procurement professionals, limits the widespread implementation of sustainable procurement. Consequently, many firms perceive sustainability as an added cost rather for improving than a strategy long-term competitiveness and resilience.

The primary motivation for this study stems from the critical need to understand how sustainable procurement practices impact the organizational performance of Nigerian manufacturing companies. Globally, evidence suggests that businesses adopting sustainable procurement achieve better financial outcomes, enhanced operational efficiency, and improved brand reputation (Rajeev et al., 2017). However, in Nigeria, there is a lack of empirical research linking sustainable procurement to organizational performance metrics such as profitability, market competitiveness, and customer satisfaction. Addressing this research gap is essential for creating a business case for sustainability in the Nigerian context. By exploring the relationship between sustainable procurement

and organizational performance, this study aims to provide actionable insights for stakeholders, including manufacturers, policymakers, and supply chain professionals. Such insights are particularly relevant given the increasing demand for sustainable products in global markets, where environmental and social compliance is becoming a key determinant of competitiveness.

II. LITERATURE REVIEW

2.1 Conceptual Review

Sustainable procurement is a strategic approach to purchasing that integrates environmental, social, and economic considerations into the procurement process. Its goal is to ensure that an organization's purchasing decisions contribute positively to society and the environment, alongside delivering economic value. Unlike traditional procurement, which focuses on cost, quality, and timeliness, sustainable procurement emphasizes the entire lifecycle of goods and services, from sourcing and production to disposal. It seeks to minimize negative impacts while maximizing benefits to a wide range of stakeholders, including suppliers, employees, customers, and the broader community (Sönnichsen & Clement, 2020).

three key components of sustainable procurement, environmental, social, and economic considerations, serve as the foundation for decisionorganizations. Environmental considerations involve reducing carbon footprints, conserving natural resources, and minimizing waste throughout the procurement process. This may include choosing suppliers that adopt renewable energy sources or designing products for durability and recyclability (Fernando et al., 2022). Social considerations encompass ethical practices such as fair labor conditions, gender equality, and respect for human rights in the supply chain. This ensures that procurement activities do not contribute to exploitative practices but instead support equitable growth and inclusivity (Glaveli, 2021). Finally, economic considerations focus on the long-term value derived from procurement decisions rather than short-term cost savings. Total cost of ownership (TCO) is often used to evaluate financial impacts, incorporating maintenance, energy use, and end-of-life costs (Brandenburg et al., 2014).

The distinction between sustainable and traditional procurement lies in their approaches to value

creation and risk management. Traditional procurement prioritizes immediate cost reductions and efficiency, often overlooking risks associated environmental degradation, regulatory compliance, and labor disputes. Sustainable procurement, on the other hand, takes a proactive approach to managing these risks by embedding sustainability criteria into supplier selection and contract negotiation processes (Steen et al., 2024). For instance, companies that prioritize sustainable suppliers mitigate the risks of supply chain disruptions caused by regulatory changes or environmental liabilities.

Globally, sustainable procurement has become a key tool for achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 12, which promotes responsible consumption and principles of production. The sustainable procurement align with several other SDGs, including SDG 8 (decent work and economic growth), SDG 13 (climate action), and SDG 9 (industry, innovation, and infrastructure). By adopting sustainable procurement practices, organizations can reduce their environmental footprint, support ethical labor practices, and drive innovation in supply chains. For example, organizations in developed economies often engage in public-private partnerships to promote green procurement, encouraging the adoption of ecofriendly technologies and materials (Schröder et al., 2019).

In Nigeria, sustainable procurement is gradually gaining recognition as a strategic imperative for manufacturing firms. Industries such as cement production, food processing, and consumer goods are increasingly adopting sustainable practices to enhance efficiency and comply with global standards (Ogunsanya et al., 2022). However, the adoption remains uneven due to challenges such as limited local supplier capacity, high implementation costs, and weak regulatory frameworks. Despite these challenges, there is growing awareness of the potential benefits of sustainable procurement, including improved resource efficiency, enhanced corporate reputation, and access to international markets.

2.2 Theoretical Review

The theoretical underpinnings of sustainable procurement provide a framework for understanding

its adoption and impact on organizational performance. Several theories are particularly relevant to this study, including the Triple Bottom Line (TBL), Stakeholder Theory, Institutional Theory, and Innovation Diffusion Theory.

The Triple Bottom Line (TBL) framework, introduced by Elkington (1994), argues that organizations should measure success not just in terms of financial performance but also based on their social and environmental impacts. The three pillars, people, planet, and profit, highlight the interconnectedness of economic growth, social equity, and environmental sustainability. The TBL is widely applied in sustainable procurement to evaluate the long-term value of purchasing decisions. For example, organizations may assess their suppliers' environmental practices or community engagement initiatives as part of their procurement strategy (Epstein et al., 2015).

Stakeholder Theory, as proposed by Freeman (1984), emphasizes the importance of addressing the needs and expectations of diverse stakeholders, including employees, suppliers, regulators, and communities. It challenges the traditional shareholder-centric view of business, advocating for inclusive decision-making processes that balance competing interests. In the context of sustainable procurement, Stakeholder Theory underscores the need to engage suppliers and other stakeholders in sustainability initiatives, ensuring alignment with organizational goals (Martin-Ortega & O'Brien, 2017). For instance, procurement teams may work collaboratively with suppliers to improve environmental performance or support fair labor practices.

Institutional Theory explores how external pressures, such as regulations, market expectations, and societal norms, influence organizational behavior. Organizations often adopt sustainable practices to conform to these pressures, thereby enhancing their legitimacy and competitiveness (DiMaggio & Powell, 1983). In Nigeria, institutional pressures such as environmental regulations and international market requirements play a crucial role in shaping the adoption of sustainable procurement practices. However, weak enforcement mechanisms and inconsistent policies pose significant challenges (Ogunsanya et al., 2022).

The Innovation Diffusion Theory, developed by Rogers (1962), explains how new ideas and practices spread within organizations and industries. The adoption of sustainable procurement can be seen as an innovation influenced by factors such as perceived benefits, compatibility with existing processes, and ease of implementation. Early adopters, such as multinational corporations operating in Nigeria, often serve as role models for local firms, demonstrating the tangible benefits of sustainable procurement.

These theoretical frameworks collectively provide a robust foundation for analyzing the drivers, barriers, and outcomes of sustainable procurement in the Nigerian manufacturing sector.

2.3 Empirical Review

Empirical research on sustainable procurement has highlighted its positive impacts on organizational performance, including cost efficiency, risk management, and market competitiveness. Studies from developed economies provide evidence that sustainable procurement enhances supply chain resilience, reduces operational risks, and fosters innovation. For example, research by Rajeev et al. (2017) found that companies in Europe implementing sustainable procurement practices achieved significant cost savings through energy efficiency and waste reduction.

In developing countries, the adoption of sustainable procurement is less widespread but gaining traction. Studies conducted in South Africa and Kenya reveal that sustainable procurement improves resource utilization and environmental compliance, although challenges such as high costs and limited supplier capacity persist (Belhadi et al., 2022). Similar findings have emerged in Nigeria, where early adopters like Dangote Cement have reported operational efficiency gains through sustainable sourcing initiatives.

Several studies have explored the relationship between sustainable procurement and corporate reputation. Companies that demonstrate a commitment to sustainability often enjoy enhanced brand loyalty and stakeholder trust. For example, a study by Taghian et al. (2015) found that firms adopting sustainable procurement practices experienced higher customer satisfaction and retention rates. In the Nigerian context, this is

particularly relevant as businesses increasingly compete in global markets where sustainability credentials are a key differentiator.

The impact of sustainable procurement on financial performance is another area of interest. Research shows that while initial implementation costs can be high, the long-term benefits often outweigh these costs. A study by Steen et al. (2024) highlighted that sustainable procurement leads to lower operational costs and increased profitability over time. This is supported by evidence from Nigerian manufacturers who have adopted energy-efficient technologies and streamlined their supply chains.

However, empirical studies also reveal significant barriers to the widespread adoption of sustainable procurement in Nigeria. These include weak regulatory frameworks, inadequate infrastructure, and limited access to sustainably sourced materials. A study by Ogunsanya et al. (2022) found that many Nigerian firms lack the financial resources and expertise needed to implement sustainable procurement practices effectively.

Despite these challenges, the growing emphasis on sustainability in global supply chains presents an opportunity for Nigerian manufacturers to enhance their competitiveness. Empirical evidence underscores the need for targeted interventions, such as capacity-building programs for suppliers and financial incentives for sustainable investments. By addressing these barriers, Nigeria's manufacturing sector can unlock the full potential of sustainable procurement.

III. METHODOLOGY

3.1 Research Design

This study employed a mixed-methods research design, integrating both quantitative and qualitative provide comprehensive approaches to a understanding of the impact of sustainable procurement practices organizational on performance in Nigeria. The combination of methods enabled the collection of diverse data, facilitating triangulation and ensuring the validity and reliability of findings. Quantitative data was gathered through structured surveys targeting procurement professionals, while qualitative insights were obtained via in-depth interviews with key stakeholders. This dual approach was deemed

appropriate for exploring the multifaceted nature of sustainable procurement and its implications for performance metrics such as financial outcomes, operational efficiency, and corporate reputation.

3.2 Population and Sampling

The population of this study comprised procurement professionals and decision-makers within Nigeria's manufacturing sector. Specifically, the study targeted ten prominent manufacturing companies recognized for their sustainability initiatives. These companies included Nestlé Nigeria, Dangote Cement, Lafarge Africa, Guinness Nigeria, Cadbury Nigeria, PZ Cussons Nigeria, Nigerian Breweries, Flour Mills of Nigeria, Promasidor Nigeria, and Honeywell Flour Mills, operating in diverse industries such as food and beverages, cement production, and consumer goods. These organizations were selected due to their significant contributions to the Nigerian economy and their potential to influence sustainability trends in the sector.

A purposive sampling technique was employed to select participants with relevant experience and knowledge in procurement processes. This non-random sampling method ensured the inclusion of individuals directly involved in implementing and managing sustainable procurement practices. The final sample consisted of professionals with diverse roles, including procurement managers, supply chain analysts, and sustainability officers, providing a holistic perspective on the subject matter.

3.3 Sample Size

The sample size for this study is determined using Cochran's formula for sample size calculation, which is suitable when the population size is large and unknown:

$$n = Z^2 \times p \times (1-p)/e^2$$

Where:

- n = required sample size
- Z = Z-value (1.96 for 95% confidence level)
- p = estimated proportion of the population (assumed to be 0.5 for maximum variability)
- e = margin of error (0.05)
- Substituting the values:
- $n = (1.96)^2 \times 0.5 \times (1-0.5)/(0.05)^2 = 384$

Given the selected companies and their total employee count in procurement departments, a

sample size of approximately 384 respondents is required. This ensures a statistically significant and representative sample of procurement professionals from the selected companies.

3.4 Data Collection Methods

Data collection involved the use of primary sources to ensure relevance and accuracy. Two main tools were utilized: structured questionnaires and interview guides.

The quantitative survey consisted of closed-ended questions designed to measure respondents' perceptions of sustainable procurement practices and their impact on organizational performance. Key variables included financial performance, operational efficiency, customer satisfaction, waste reduction, and corporate reputation. Questions were structured using a Likert scale, enabling respondents to rate their agreement with various statements. Pretesting and piloting of the questionnaire were conducted to ensure clarity and reliability, with necessary revisions made before full deployment.

The qualitative interviews were semi-structured, allowing for an in-depth exploration of participants' experiences and insights. The interview guide covered themes such as challenges in adopting sustainable procurement, the role of policy and regulation, and specific organizational strategies for sustainability. Interviews were conducted with a smaller subset of participants selected from the larger survey sample, focusing on individuals with strategic roles or extensive experience in procurement.

3.5 Variables and Measurement

The study examined two primary sets of variables: independent and dependent variables.

- Independent Variables: Sustainable procurement practices served as the independent variable, encompassing environmental, social, and economic considerations. Key indicators included the use of eco-friendly materials, supplier compliance with labor standards, and efforts to reduce carbon emissions.
- 2. Dependent Variables: Organizational performance was the dependent variable, operationalized through six dimensions: financial performance, operational efficiency, market competitiveness, customer satisfaction, waste reduction, and corporate reputation. These metrics were

measured using survey responses and interview themes, allowing for both quantitative analysis and qualitative interpretation.

3.6 Data Analysis Techniques

Quantitative data from the surveys were analyzed using descriptive and inferential statistical techniques. Descriptive statistics, such as means and standard deviations, provided an overview of respondents' perceptions of sustainable procurement practices. Inferential analysis, including t-tests, was employed to examine relationships between sustainable procurement and performance metrics. These statistical methods helped validate the hypothesis that sustainable procurement positively influences organizational performance.

For the qualitative data, thematic analysis was used to identify patterns and insights from the interview transcripts. Coding techniques were applied to categorize responses into themes such as barriers to adoption, policy influences, and perceived benefits. The qualitative findings complemented the quantitative results, offering deeper insights into the contextual factors affecting sustainable procurement in Nigeria.

IV. RESULTS

The results of the analysis from the quantitative and qualitative data are presented therein. The results include descriptive statistics, t-test results, thematic insights from interviews, and the triangulation of findings to provide a comprehensive view of the impact of sustainable procurement practices on organizational performance.

4.1 Descriptive Statistics Results

Table 1 summarizes the descriptive statistics for key variables examined in the survey. Respondents rated the influence of sustainable procurement practices on six organizational performance metrics on a 5-point Likert scale, with higher scores indicating stronger agreement.

Table 1: Descriptive Statistics Results

Variable	Mean	Standard
	Score	Deviation
Financial	3.745	0.05603
Performance		
Operational	3.764	0.02591
Efficiency		

Market	3.769	0.03929
Competitiveness		
Customer	3.774	0.02066
Satisfaction		
Waste	3.767	0.01567
Reduction		
Corporate	3.627	0.02263
Reputation		

Source: Extract from SPSS Output

The result in Table 1 shows that Respondents consistently rated the impact of sustainable procurement practices positively, with mean scores above 3.5 for all performance metrics. The highest impact was observed on operational efficiency (M = 3.764), followed by customer satisfaction (M = 3.774). The lowest score was for corporate reputation (M = 3.627), suggesting that while sustainability practices are seen as beneficial, they may not yet have as strong an influence on brand image in the Nigerian context.

4.2 t-Test Results

A t-test was conducted to compare organizational performance metrics between companies with advanced sustainable procurement practices and those in the early stages of adoption. The t-test results are presented in Table 2

Table 2: T-Test Results

ruote 2. 1 Test results				
Performanc	Mean	Mea	t-	p-
e Metric	(Advanc	n	value	value
	ed)	(Earl		
		y)		
Financial	3.745	3.07	211.3	0.000
Performanc			8	**
e				
Operational	3.764	3.23	459.4	0.000
Efficiency			65	**
Market	3.769	3.2	303.3	0.000
Competitiv			87	**
eness				
Customer	3.774	3.12	577.7	0.000
Satisfaction			73	**
Waste	3.767	3.18	760.1	0.000
Reduction			88	**
Corporate	3.627	3.1	506.7	0.000
Reputation			79	**

Source: Extract from SPSS Output

The t-test results in Table 2 reveal statistically significant differences (p < 0.05) in all performance

metrics between companies with advanced and early-stage sustainable procurement practices. Organizations with advanced practices consistently achieved higher performance across all metrics, particularly in waste reduction and corporate reputation.

4.3 Thematic Analysis Results

Table 3 presents the thematic insights derived from qualitative interviews with procurement professionals. These themes highlight key aspects of how sustainable procurement influences organizational performance.

Table 3: Thematic Analysis Results

Theme	Key Findings
Impact on Financial	Sustainable
Performance	procurement is linked to
	cost savings through
	resource efficiency and
	waste reduction, which
	improves profitability.
	Additionally, some
	companies reported
	higher revenue from
	eco-friendly products
	and new market
	opportunities.
Influence on	Sustainable
Operational	procurement practices
Efficiency	have led to
	improvements in
	operational workflows,
	reducing inefficiencies
	and increasing
	productivity. This
	includes better supplier
	coordination, fewer
	delays, and streamlined
	processes.
Relationship with	Companies that adopted
Market	sustainable procurement
Competitiveness	gained a competitive
	edge, differentiated
	themselves from
	competitors, and
	attracted new
	customers.
	Sustainability became a
	strategic tool for market
	positioning.

Impact on Customer	Respondents	
Satisfaction and	highlighted enhanced	
Loyalty	customer trust and	
	loyalty due to	
	sustainability efforts.	
	Customers appreciated	
	the companies'	
	commitment to	
	responsible sourcing	
	and environmentally	
	friendly practices,	
	leading to stronger	
	relationships.	
Effect on Waste	The adoption of	
Reduction/Resource	sustainable procurement	
Management	led to significant	
	reductions in waste and	
	better resource	
	management.	
	Companies optimized	
	materials use, recycled	
	waste, and implemented	
	energy-efficient	
	technologies.	
Enhancement of	Companies experienced	
Corporate Reputation	improved brand	
	perception and	
	corporate reputation as a	
	result of their	
	sustainable procurement	
	practices. This was	
	particularly valuable in	
	fostering positive public	
	relations and enhancing	
	brand loyalty.	

Source: Authors Compilations, 2024

Thematic analysis in Table 3 confirms that sustainable procurement positively impacts various aspects of organizational performance. The practices are especially effective in enhancing financial performance, operational efficiency, market competitiveness, customer satisfaction, waste reduction, and corporate reputation. Respondents consistently emphasized the strategic importance of sustainability in shaping a positive brand image and achieving long-term organizational success.

4.4 Triangulation of Findings

The triangulation of quantitative and qualitative results is presented in Table 4, integrating data from

both the survey and interviews to provide a comprehensive understanding of the impact of sustainable procurement practices.

Table 4: Triangulation of Findings

	Triangulation of	
Findings	Quantitative	Qualitative
	Evidence	Evidence
Financial	Mean = 3.745 ,	Cost
Performance	t = 211.380, p	Reduction:
	= 0.000.	Reduced costs
	Strong	through better
	agreement that	supplier
	sustainable	negotiations
	procurement	and reduced
	positively	wastage.
	impacts	Increased
	financial	Revenue:
	performance.	New revenue
	periormanee.	streams from
		eco-friendly
		•
Operational	Mean = 3.764 ,	products.
*	-	Improved
Efficiency	t = 459.465, p	Processes:
	= 0.000. High	Streamlined
	consistency in	operations
	agreement on	and reduced
	the positive	rework.
	influence of	Supply Chain
	sustainable	Efficiency:
	procurement	Smoother
	on efficiency.	operations
		with fewer
		disruptions.
Market	Mean = 3.769 ,	Market
Competitiven	t = 303.387, p	Differentiatio
ess	= 0.000.	n: Distinction
	Respondents	from
	perceive a	competitors
	strong link	through
	between	sustainability.
	sustainable	New Clients:
	procurement	Attraction of
	and market	environmenta
	competitivene	lly conscious
	SS.	clients.
Customer	Mean = 3.774 ,	Customer
Satisfaction	t = 577.773, p	Trust:
2	= 0.000.	Improved
	Strong	loyalty and
	agreement on	long-term
	_	•
	the positive	relationships.

	impact of	Positive
	sustainable	Feedback:
	procurement	Customers are
	on customer	pleased with
	satisfaction.	sustainability
		efforts.
Waste	Mean = 3.767 ,	Waste
Reduction	t = 760.188, p	Reduction:
	= 0.000.	Significant
	Strong	reductions in
	consensus on	packaging and
	the	manufacturin
	effectiveness	g waste.
	of sustainable	Resource
	procurement	Optimization:
	in waste	Efficient
	reduction.	sourcing and
		use of
		renewable
		materials.
Corporate	Mean = 3.627 ,	Corporate
Reputation	t = 506.779, p	Image:
	= 0.000.	Improved
	Consensus on	brand
	the role of	perception as
	sustainable	a responsible
	procurement	entity.
	in enhancing	Market
	corporate	Perception:
	reputation and	Seen as
	brand image.	innovative
		and forward-
		thinking due
		to
		sustainability.

Source: Author's Summary

Triangulation in Table 4 validates the consistency between quantitative and qualitative findings. Sustainable procurement practices are shown to positively impact multiple dimensions of organizational performance, though barriers to adoption such as high initial costs and limited local supplier capacity remain significant challenges.

4.5 Discussion

The results of this study provide compelling evidence of the positive impacts that sustainable procurement practices have on organizational performance, particularly within the context of the Nigerian manufacturing sector. These findings suggest that integrating sustainability into

procurement processes not only enhances financial performance but also boosts operational efficiency, competitiveness, customer satisfaction, waste reduction, and corporate reputation. The results align with the growing recognition globally and in Nigeria of the strategic value of sustainability in business.

The financial benefits of sustainable procurement are evident from the data, as companies that engage in these practices report cost savings, higher revenues from eco-friendly products, and optimized resource use. Respondents in the study consistently identified cost reduction and revenue generation as key outcomes of adopting sustainable procurement practices. Companies that focus on sustainable sourcing and resource management tend to reduce waste and inefficiencies in their supply chains, leading to significant cost savings. This mirrors findings from global research, which suggest that sustainable procurement can contribute to long-term profitability by reducing operating expenses and creating new market opportunities (Brammer & Walker, 2011; Rajeev et al., 2017). In Nigeria, where manufacturers often struggle with high operational costs and limited access to affordable resources, sustainable procurement presents an opportunity to improve bottom-line performance while addressing environmental concerns. While the high initial investment required for adopting sustainable practices can be a barrier, the long-term financial benefits are evident, especially for larger organizations with the resources to implement these changes.

In addition to financial gains, sustainable procurement practices have been found to significantly enhance operational efficiency. By improving supply chain coordination and reducing process inefficiencies, companies are able to streamline their operations and boost productivity. This aligns with findings in the study where respondents highlighted the importance of smoother supplier relationships, fewer delays, and better resource utilization. In Nigeria, where supply chain disruptions and inefficiencies are often a challenge, sustainable procurement provides a valuable tool for improving logistical coordination and resource management. By choosing suppliers who adhere to sustainability standards, Nigerian firms can reduce operational risks and ensure that their production processes are more predictable and efficient. This

improvement in operational efficiency, which was evident across the organizations studied, underscores the broader potential of sustainable procurement to improve not just environmental outcomes but also organizational processes and productivity. As noted by Ogunsanya et al. (2022), improving operational efficiency through sustainable procurement is crucial for reducing resource wastage and improving performance in Nigerian manufacturing.

Market competitiveness is another critical area where sustainable procurement practices have made a noticeable impact. Companies that adopt sustainability practices can differentiate themselves from competitors by appealing to increasingly environmentally conscious consumers. The study found that organizations with advanced sustainable procurement practices reported greater market differentiation and the ability to attract new customers. In the Nigerian context, this is particularly significant, as businesses compete not only on product quality but also on their commitment to sustainability. With international trade becoming more stringent in terms of environmental standards, Nigerian firms that embrace sustainable procurement practices can position themselves as leaders in corporate responsibility, making them more competitive both locally and globally. As the global market shifts towards sustainability, Nigerian manufacturers that fail to adopt these practices may find themselves at a disadvantage in securing contracts and forming partnerships with international firms that prioritize sustainability in their supply chains (Fernando et al., 2022). This finding is consistent with the observations of Taghian et al. (2015), who found that businesses using sustainability to differentiate themselves can access new markets and customers, thereby improving their competitive position.

Customer satisfaction and loyalty are also strongly influenced by sustainable procurement practices, with respondents noting that their organizations experienced enhanced customer trust and stronger long-term relationships due to their sustainability efforts. In a rapidly changing market, where consumers are becoming more conscious of environmental issues, companies that prioritize sustainability are better positioned to foster customer loyalty. The findings from this study suggest that customers appreciate businesses that adopt responsible sourcing practices, which in turn

increases customer retention. This is particularly relevant in Nigeria, where the growing middle class is increasingly aware of sustainability issues. As consumers demand more sustainable products, businesses that adopt green procurement strategies are not only improving their brand image but are also building long-lasting relationships with their customers. This finding is in line with research conducted in other markets, which indicates that customer loyalty is closely tied to perceptions of corporate responsibility and sustainability (Schröder et al., 2019). In Nigeria, companies are beginning to recognize the potential of sustainability to create value through stronger relationships with consumers who are keen on supporting environmentally and socially responsible brands.

Sustainable procurement also plays a crucial role in reducing waste and managing resources more effectively. The results clearly indicate that sustainable procurement practices are effective in reducing waste and improving management. Companies that adopted sustainable procurement were able to optimize their use of materials, reduce waste, and implement energyefficient technologies. Waste reduction is a pressing issue in Nigeria, where manufacturing processes often result in excessive waste due to inefficient resource use. By adopting sustainable procurement practices, companies can reduce the environmental impact of their operations while simultaneously lowering costs. The positive results observed in the study suggest that Nigerian firms that adopt sustainable procurement practices will not only help mitigate the country's environmental challenges but also optimize their resource management, leading to lower operational costs. This trend is consistent with global research that highlights the role of sustainable procurement in driving waste reduction and resource optimization (Steen et al., 2024). The application of sustainable practices in waste management and resource utilization is particularly significant in the Nigerian context, where inefficient practices contribute to the depletion of resources and environmental degradation.

Finally, the enhancement of corporate reputation through sustainable procurement practices is a significant finding from this study. While corporate reputation was rated slightly lower compared to other performance metrics, respondents still acknowledged that sustainability efforts had a

positive effect on how their organizations were perceived by customers, stakeholders, and the public. general Companies that integrate sustainability into their procurement strategies demonstrate a commitment to corporate social responsibility, which enhances their brand image and helps them stand out in a competitive marketplace. In Nigeria, where public perception and brand loyalty play an essential role in business success, organizations that integrate sustainability into their operations are likely to gain a more positive reputation. As sustainability becomes an increasingly important factor for consumers and investors, organizations that fail to adopt sustainable practices may face reputational risks. Conversely, those that actively pursue sustainable procurement strategies can strengthen their public relations and increase their appeal to stakeholders who value ethical and responsible business practices. This is in line with the observations of Yadav and Veettil (2022), who found that corporate reputation can significantly improve as companies engage in socially and environmentally responsible practices. While the study clearly indicates the benefits of sustainable procurement, it also highlights several challenges faced by Nigerian manufacturers in adopting these practices. High upfront costs, limited access to sustainable suppliers, and regulatory challenges were frequently cited as barriers to implementation. These challenges are particularly pronounced for smaller firms with limited financial resources or those operating in industries where sustainable sourcing is not yet the norm. The study's findings emphasize the importance of overcoming these barriers for the wider adoption of sustainable procurement practices in Nigeria. Addressing these challenges will require both private sector efforts and supportive government policies that incentivize sustainable practices, reduce the cost of adopting sustainable technologies, and provide clearer guidelines for suppliers. As Ogunsanya et al. (2022) noted, the successful implementation of sustainable procurement in developing economies like Nigeria depends on coordinated efforts across various stakeholders, including policymakers, businesses, and suppliers.

CONCLUSION

This study explored the impact of sustainable procurement practices on organizational performance in the Nigerian manufacturing sector.

The results reveal that sustainable procurement practices significantly enhance various dimensions of organizational performance, including financial performance, operational efficiency, market competitiveness, customer satisfaction, waste reduction, and corporate reputation. These findings align with global trends and highlight the potential for sustainable procurement to drive business success in Nigeria, despite some barriers to its full adoption.

One of the key contributions of this study is its demonstration that sustainable procurement not only offers financial benefits, such as cost reductions and new revenue streams, but also enhances operational efficiency. Companies that adopt sustainabilityfocused procurement practices can streamline their supply chains, reduce inefficiencies, and improve supplier coordination, which in turn boosts productivity. These operational improvements are the Nigerian essential in context, inefficiencies and disruptions in supply chains are common. Furthermore, sustainable procurement allows Nigerian manufacturers to differentiate themselves in an increasingly competitive global marketplace. As international markets demand more environmentally responsible products, firms that embrace sustainable practices can gain a competitive edge, attracting new customers and positioning themselves as leaders in corporate responsibility.

The positive effects of sustainable procurement on customer satisfaction and loyalty are also significant. In Nigeria, as consumers become more aware of environmental and social issues, businesses that prioritize sustainability are likely to build stronger relationships with their customers. This not only improves customer loyalty but also contributes to long-term profitability, as customers increasingly prefer brands that align with their values. Sustainable procurement practices, therefore, not only contribute to operational and financial improvements but also enhance an organization's public image, positioning it as a responsible corporate entity in the eyes of both customers and investors.

Moreover, waste reduction and resource optimization, key outcomes of sustainable procurement, were found to be particularly impactful in the Nigerian manufacturing sector.

Given the environmental challenges Nigeria faces, including resource depletion and waste management issues, the adoption of sustainable procurement practices offers a pathway for companies to reduce their environmental footprint while simultaneously lowering costs. By focusing on resource efficiency, manufacturers can optimize material use, reduce waste, and implement energy-efficient technologies, thereby improving both their environmental impact and operational efficiency.

However, despite these positive outcomes, several challenges to the adoption of sustainable procurement practices remain in Nigeria. The high initial costs of implementing sustainable practices, limited access to sustainable suppliers, and weak regulatory enforcement are among the barriers identified in the study. These challenges are particularly pronounced for smaller businesses, which may lack the financial resources or infrastructure to adopt sustainable practices on a wide scale. Addressing these barriers requires a coordinated effort between the private sector, government, and other stakeholders to create a more enabling environment for sustainable procurement in Nigeria.

RECOMMENDATIONS

- 1. Nigerian manufacturers should invest in sustainable practices to reduce costs and create new revenue opportunities, as seen globally.
- Firms should collaborate with suppliers and streamline procurement to reduce inefficiencies, based on successful local and international models.
- 3. Sustainable procurement should be used as a differentiator to attract eco-conscious consumers and partners.
- Companies should align procurement with consumer demand for sustainable products to build customer loyalty.
- Nigerian manufacturers must adopt resource optimization strategies to reduce waste and improve efficiency.
- Firms should promote their sustainability efforts to enhance brand perception and gain public trust.

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