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PROCUREMENT BENCH MARKETING AND SUPPLY CHAIN PERFORMANCE OF MARITIME COMPANIES IN PORT HARCOURT.

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ABSTRACT
This study examined the relationship between Procurement Benchmarketing and Supply Chain Performance of Maritime Companies in Port Harcourt. Specifically, the study investigated the relationships between peer comparison, process standardization, and supply chain performance. Anchored on the Resource-Based View. A correlational research design was adopted. The population of this study comprised of 20 maritime companies in Rivers State. The sample size of the study is 20. To generate data for the study, a total of one hundred (100) managers were selected on the basis of five managers per firm were used as the study subjects. The hypothesis were analyzed with the use of the Pearson Product Moment Correlation was supplemented with aid of SPSS version 21.0 The results revealed that procurement benchmarketing strongly related with supply chain performance, peer comparison significantly relate with risk integration, similarly, process The study concluded that procurement benchmarketing is a vital strategic enabler for strengthening maritime logistics systems and ensuring sustained competitive advantage in Port Harcourt it recommended that maritime companies institutionalize peer comparison systems, adopt holistic cost evaluation techniques and implement standardized procurement processes to strengthen supply chain performance.

Keywords: Procurement Benchmarketing, Peer Comparison, Cost Ownership, supply chain performance, maritime companies.

INTRODUCTION
The maritime sector operates at the intersection of global trade, logistics and infrastructure, making efficient procurement and robust supply chain performance critical to organizational survival and competitiveness. Procurement in maritime companies encompasses acquisition of ships' spares and equipment, port services, logistics contracts and a wide range of goods and services that support vessel operations and terminal activities; when procurement systems are inefficient, they create cost overruns, delays and service disruptions that propagate throughout the supply chain (Monczka et al., 2015). Benchmarketing procurement—systematically comparing an organisation's purchasing practices, costs and outcomes against recognized best practices or peer organizations—therefore offers maritime companies a structured route to identify performance gaps, adopt proven practices, and prioritise improvement initiatives that reduce lead times, lower total cost of ownership, and increase reliability of supply (Camp, 1989; Monczka et al., 2015).

Supply chain performance in the maritime context must be understood both in traditional logistics terms (cost, speed, reliability) and in industry-specific dimensions such as port turnaround times, berth productivity, inventory availability for critical spares, and contractual performance of service providers. Measures that capture these dimensions are essential because the maritime supply chain is highly interdependent: a single procurement failure — for example, late delivery of a critical spare part can ground a vessel, causing cascading schedule slippages and large opportunity costs (Beamon, 1999; Christopher, 2016). Accordingly, benchmarketing procurement is not only about unit price or immediate savings; it is about aligning procurement practices with broader supply chain objectives (responsiveness, resilience and total cost reduction) so that procurement decisions support operational continuity and customer service levels (Monczka et al., 2015; Christopher, 2016).

Maritime companies face sector-specific pressures that make procurement benchmarketing particularly valuable. Globalisation has increased competitive pressure on ports, shipping lines and terminal operators to deliver faster, cheaper and more reliable services while complying with stricter regulatory and environmental standards. At the same time, volatility in input prices, geopolitical risks and supply chain disruptions (e.g., from extreme weather or regional instability) have increased the premium on procurement agility and supplier risk management (Notteboom & Rodrigue, 2005; Christopher, 2016). Benchmarketing, enables maritime organisations to gauge how well their procurement strategies balance cost-efficiency with flexibility and risk mitigation compared to industry leaders, and to identify concrete process, systems or supplier-management changes that would improve resilience and performance.

Within the Nigerian context and specifically in Port Harcourt a state with significant port-related activity and a concentration of maritime service providers—the relevance of procurement benchmarketing is heightened by local operational realities such as infrastructure constraints, fragmented supplier markets and regulatory complexity. These contextual factors can amplify the impact of procurement weaknesses on supply chain performance, making it imperative for maritime companies in the region to both adopt internationally recognised procurement best practices and tailor them to local market conditions (Monczka et al., 2015; Christopher, 2016).

Finally, the theoretical and managerial rationale for linking procurement benchmarketing to supply chain performance is grounded in the view that purchasing is a strategic function that influences competitiveness through cost, quality, innovation and continuity of supply. Benchmarketing provides a mechanism for turning that strategic potential into measurable outcomes by identifying best practices, enabling performance targets, and fostering continuous improvement cycles (Camp, 1989; Monczka et al., 2015). For maritime companies in Rivers State, rigorous benchmarketing of procurement processes therefore promises not only operational gains but also strategic benefits: improved vessel and terminal availability, enhanced reputation with shippers and stakeholders, and strengthened capability to cope with local and global supply chain shocks.

Conceptual/Operational Framework

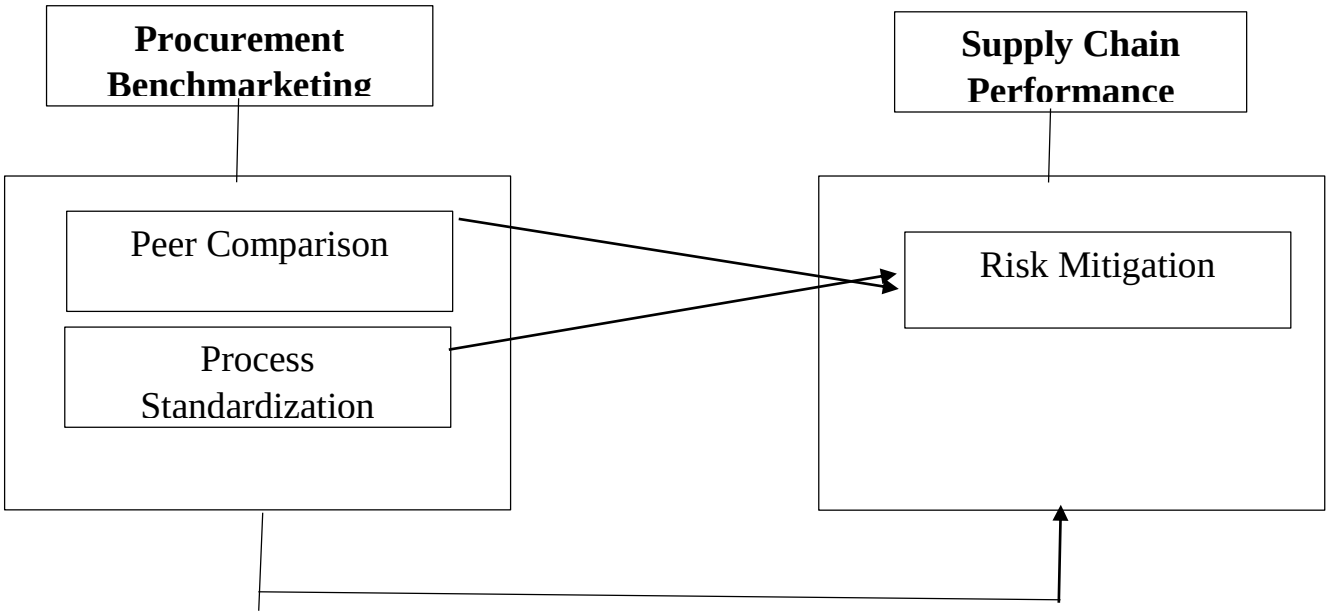

Figure 1.1: Showing the Relationship between Procurement Benchmarketing and Supply Chain Performance of Maritime Companies in Port Harcourt.
Source: Ogundele & Oladi (2021), Chen Etal (2004), Monecka Etal (2015)

Research questions

The following research questions were raised, to guide the conduct of the study

1. What is the relationship between the peer comparison and risk mitigation of maritime companies in Port Harcourt.
2. What is the relationship between process standardization and risk mitigation of maritime companies in Port Harcourt.

Research hypotheses

$H0_1$: There is no significant relationship between peer comparison and risk mitigation of maritime companies in Port Harcourt.

$H0_2$: there is no significant relationship between cost ownership analysis and risk mitigation of maritime companies in Port Harcourt.

Review of Related Literature

Concept of Procurement Benchmarketing

Procurement benchmarketing is a strategic evaluation approach through which organizations compare their procurement processes, practices, and performance metrics with those of industry leaders or recognized standards. In the context of maritime companies in Rivers State, procurement benchmarketing serves as a vital tool for improving supply chain performance by identifying gaps, inefficiencies, and opportunities for innovation. The concept is rooted in the broader principle of continuous improvement, which emphasizes learning from best-in-class companies to enhance organizational efficiency (Carr & Smeltzer, 1999). At its core, procurement benchmarketing involves systematically collecting data on key procurement activities such as supplier selection, contract management, cost efficiency, lead time reduction, and compliance with procurement policies. By comparing these indicators with those of high- performing organizations, maritime companies are able to determine the extent to which their procurement systems support overall supply chain objectives. According to Schiele (2007), the benchmarketing process provides insights that help organizations align their procurement capabilities with strategic goals, particularly in complex and dynamic industries such as maritime logistics.

In maritime operations, where timely delivery of spare parts, equipment, and marine services is essential to vessel availability and operational continuity, procurement benchmarketing plays an essential role in strengthening supply chain responsiveness. It helps organizations understand how well they manage supplier relationships, negotiate costs, and utilize procurement technologies relative to industry benchmarks. When effectively applied, benchmarketing fosters the adoption of superior procurement practices that can minimize operational delays, reduce total procurement costs, and improve resource utilization (Batenburg & Versendaal, 2008). This is particularly relevant in Rivers State, where maritime companies operate in a competitive environment and must adhere to global procurement standards to remain efficient and reliable. Moreover, procurement benchmarketing provides a foundation for performance measurement and strategic decision-making. It enables companies to set realistic but ambitious procurement performance targets based on empirical insights rather than assumptions. Through comparative analysis, maritime companies can uncover performance gaps that hinder supply chain efficiency, such as prolonged procurement cycles, inconsistent supplier performance, or inadequate use of digital procurement tools. As noted by Vaidya and Campbell (2016), benchmarketing enhances transparency and accountability, ensuring that procurement processes contribute meaningfully to broader supply chain goals such as cost reduction, service quality, and operational sustainability. Procurement benchmarketing is an essential concept for improving supply chain performance in maritime companies in Rivers State. It equips companies with, the knowledge to optimize procurement activities, strengthen supplier networks, and adopt globally competitive practices. By leveraging insights from industry leaders and aligning internal processes with best practices, maritime companies can enhance their supply chain efficiency and remain resilient in an increasingly demanding operational environment.

Peer comparison

Peer comparison as a dimension of procurement benchmarketing involves evaluating an organization's procurement practices and performance against those of similar organizations within the same industry or sector. In the context of maritime companies in Rivers State, peer comparison allows these organizations to identify gaps and areas for improvement by examining how their procurement processes measure up against their competitors or industry leaders. This approach helps to establish realistic targets based on proven best practices, thereby fostering continuous improvement in procurement efficiency and effectiveness (Ogunleye & Oladipo, 2021). By benchmarketing against peers, maritime companies can gain insights into innovative procurement strategies, cost management techniques, and supplier relationship management, which are critical for optimizing their supply chain performance. Given the highly competitive and operationally complex maritime industry in Rivers State, peer comparison enables companies to adapt effective procurement strategies that enhance overall supply chain resilience, reduce delays, and minimize costs. As a result, peer benchmarketing can serve as a driving force for strategic procurement reforms, ultimately leading to improved supply chain performance and competitiveness within the industry (Ameh & Ibrahim, 2018).

Peer comparison is a central measure of procurement benchmarketing and plays a critical role in evaluating and improving the supply chain performance of maritime companies in Rivers State. Procurement benchmarketing involves assessing an organization's procurement practices against established standards or the performance of leading companies in the same industry to identify gaps, inefficiencies, and opportunities for improvement. Peer comparison, in particular, enables maritime companies to systematically evaluate how their procurement activities such as supplier selection, cost management, procurement cycle time, and contract efficiency which compare with those of similar companies operating under comparable market and environmental conditions.

Through peer comparison, maritime companies are able to understand whether their procurement practices align with industry norms or fall short of emerging best practices. This form of benchmarketing provides context-specific insights, which are particularly important in a dynamic and competitive maritime environment such as Rivers State, where operational challenges, port congestion, regulatory requirements, and infrastructural constraints significantly influence supply chain outcomes. By comparing performance indices such as procurement cost efficiency, supplier reliability, lead-time accuracy, and inventory turnover rates with those of peer organizations, companies can make evidence-based improvements that enhance overall supply chain performance (Chen, Paulraj & Lado, 2004).

Furthermore, peer comparison fosters a culture of continuous improvement by helping procurement managers identify innovative practices that competitors both local and international—use to optimize their supply chains. It also stimulates strategic learning, as companies are encouraged to adopt superior procurement models that enhance responsiveness, reduce delays, and lower operating costs, which are essential for competitiveness in the maritime sector. According to Schiele (2007), benchmarketing against peers improves an organization's ability to achieve cost reductions, strengthen supplier relationships, and increase operational efficiency. When maritime companies in Rivers State effectively adopt peer comparison as a procurement benchmarketing tool, they are better positioned to streamline procurement companies in Port Harcourt because it translates operational performance differences into monetary impacts that procurement can influence. When tied to port performance indicators (throughput, turnaround, handling rates) and implemented with careful data collection and ABC- style costing, cost of ownership enables procurement benchmarketing to become a direct lever for improving supply chain and port performance rather than merely a purchasing scorecard.

Process Standardization

Process standardization in procurement refers to the deliberate design and enforcement of uniform procedures, templates, approval workflows, and performance metrics across purchasing activities

so that buying decisions, supplier selection, contracting and invoice processing follow a consistent, measurable path; when integrated into a procurement benchmarketing program, standardized processes provide the common baseline needed to compare performance internally and against external peers, because benchmarketing requires that measures are comparable and that variation due to local ad-hoc practices is minimized. Standardization reduces process variability, shortens cycle times, increases contract compliance and improves data quality for metrics such as purchase-to- pay lead time, maverick spend and supplier on-time delivery - improvements that make procurement benchmarketing outputs more reliable and actionable for maritime companies that depend on tight scheduling and predictable inputs.

Within the context of maritime companies in Port Harcourt, process standardization is especially important because port operations and ship servicing are time-sensitive and exposed to congestive and administrative delays; when procurement rules, specification templates and vendor on-boarding procedures are standardized, maritime companies can better align purchases with berth schedules and maintenance windows, reducing vessel turnaround time and cargo dwell (studies of Nigerian seaports and port logistics performance highlight long dwell times and variability that increase cost and delay). Standardized procurement also enables more meaningful external benchmarketing against international port peers or regional best practices (for example, benchmarketing freight, sourcing and logistics processes used in ocean freight and terminal services), because standardized inputs allow companies to identify true performance gaps rather than artifacts of inconsistent practice.

Process standardization is not merely an internal control; it is a necessary precondition for effective procurement benchmarketing and a lever that can translate benchmarketing insights into tangible supply chain gains for maritime operators. By committing to standardized specifications, approvals, data capture and supplier governance, maritime companies create the stable, comparable environment benchmarketing needs and the bperational predictability that reduces dwell times, improves supplier delivery, and enhances overall supply chain performance.

Risk Mitigation

Risk mitigation is a critical measure of supply chain performance, particularly within maritime companies in Port Harcourt where operational environments are characterized by uncertainty, infrastructural limitations, regulatory inconsistencies, and volatile market conditions. In the context of procurement benchmarketing, risk mitigation reflects the extent to which organizations proactively identify, assess, and manage potential disruptions that could impair the flow of goods and services. Effective procurement benchmarketing enables maritime companies to compare their practices with industry standards, adopt superior procurement models, and implement strategies that minimize vulnerabilities across their supply chains (Monczka et al., 2020). By evaluating suppliers' reliability, transport risks, price fluctuations, and compliance issues against recognized benchmarks, companies become better positioned to anticipate disruptions and respond with resilience-enhancing mechanisms.

In maritime operations, supply chain risks often emerge from delays in port operations, equipment breakdowns, inconsistent supplier quality, and external shocks such as policy changes or global shipping disruptions. Procurement benchmarketing helps companies mitigate these risks by promoting data-driven decision-making that strengthens supplier selection, contract management, and procurement scheduling (Christopher, 2016). When benchmarketing insights are integrated into procurement processes, maritime companies develop more robust risk assessment frameworks that ensure alternative sourcing options, buffer inventories, and enhanced peer comparison. These practices collectively improve supply chain agility, enabling companies to absorb shocks with minimal service interruptions, thereby enhancing overall supply chain performance.

Furthermore, risk mitigation as a performance measure emphasizes the importance of contingency planning, predictive analytics, and real-time monitoring. Maritime companies that benchmark their procurement risk controls against best-in-class companies are more likely to adopt advanced digital

tools such as automated tracking systems, risk dashboards, and compliance monitoring software, which contribute to proactive risk detection and response (Tang & Musa, 2011). The ability to foresee and manage risks reduces operational costs, prevents stockouts, minimizes demurrage charges, and enhances customer satisfaction, all of which are critical indicators of supply chain performance. In Rivers State, where maritime operations are central to regional logistics, strong risk mitigation practices derived from procurement benchmarketing significantly contribute to stability, efficiency, and competitive advantage.

Procurement benchmarketing is a lever for supply chain performance in maritime companies because it reveals performance gaps, motivates targeted procurement improvements, and establishes measurement systems that align suppliers and operations. When properly implemented and adapted to local realities, benchmarketing can reduce costs, shorten lead times, increase asset utilisation, and ultimately raise the reliability and competitiveness of maritime supply chains in Rivers State (Spendolini, 1992; Monczka et al., 2015; Christopher, 2016; Rodrigue, 2020).

Theoretical Review

This Study is Anchored on Resource Based (RBV),

The Resource-Based View (RBV) theory explains firm performance by focusing on internal resources and capabilities rather than external market conditions. It argues that organizations achieve sustainable competitive advantage when they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN) (Barney, 1991). Such resources include both tangible assets, like technology and financial capital, and intangible assets, such as organizational knowledge, managerial skills, and innovative capacity. The core assumption of RBV is that companies that effectively identify, develop, and deploy these unique resources can create value that competitors find difficult to replicate, leading to superior and sustained performance. Within the context of procurement benchmarketing and supply chain performance of maritime companies in Rivers State, RBV provides a useful theoretical lens for understanding how procurement practices function as strategic capabilities. Maritime companies operate in a highly competitive and regulated environment where efficiency, reliability, and cost control are essential. Procurement benchmarketing enables companies to evaluate their purchasing processes against industry best practices, helping them improve supplier selection, cost management, and delivery efficiency. When embedded within organizational routines, such benchmarketing practices become valuable internal capabilities that contribute directly to enhanced supply chain performance.

Empirical Review

Akintokunbo and Obom (2021) investigated the effect of supplier evaluation on supply chain performance of shipping companies in Rivers State, Nigeria. The study adopted an explanatory research design with a causal type of investigation. Both primary and secondary methods of data collection were used to obtain -relevant data for analysis. The instrument of data collection employed was the questionnaire. The study population comprised of the forty-five (45) shipping companies operating in Rivers State. Two top management staff from each of the shipping companies operating in Rivers State were selected as respondents for the study hence a total of ninety (90) respondents were used for the study. The data was analyzed using the Pearson's Product Moment Correlation statistic through the aid of statistical packages for social science version 23.0. The result of the findings revealed the existence of significant and positive relationship between supplier evaluation and supply chain performance of shipping companies in Rivers State. It was concluded that supplier evaluation affect supply chain performance of shipping companies in Rivers state and hence recommended that managers of shipping companies should capitalize on the relevant role of supplier evaluation in their operations to ensure efficient supply chain performance. Ofoegbu, and Omoruyi (2021) examined the relationship between supply chain management practices and the operational performance of logistic companies in Rivers State. Contingency theory and resource-based view theory were adopted as the theoretical framework. The study focused on

staff with full employment in logistic companies in Rivers State. Preliminary investigation revealed a total of two hundred and seventy-one (271) owners and operators of logistics companies in Rivers State. The determination of the sample size was done using the Krejcie and Morgan (1970) table and the result was 159 members of staff. Pearson Product Moment Correlation Coefficient statistical tool and simple regression analysis were used to analyze the hypotheses with the aid of Statistical Packages for Social Sciences (SPSS) version 22. The findings revealed a positive and strong relationship between the variables i.e., (customer relationship, information sharing, and operational performahce of logistic companies in River's state). It was recommended that logistic companies should develop cordial relationships with their customers, and ensure free flow of information among different units and partners. This will enhance efficiency in terms of the cost of operating the business.

Methodology

Population of the study

The population of the study comprised of 20 maritime companies in Port Harcourt.

Research design

The research design used for this study was Pearson product moment correlation and supplemented with the aid of SPSS version 21.0.

Research instrument

The major instrument for the data collection was a well-structured questionnaire.

Data analysis

The hypothesis was tested statistically with PPMC.

Test of Hypothesis

Hypothesis

H03: There is no significant relationship between total peer comparison and risk mitigation of maritime companies in Port Harcourt.

Table 1: Result of bivariate analysis between peer comparison and risk mitigation of maritime companies in Port Harcourt.

			Peer comparison	Risk mitigation
Pearson Correlation (r)	Peer comparison	*Correlation coefficient*	1.000	.844**
		Sig. (2 tailed)	.	.001
		N	90	90
	Risk mitigation	*Correlation coefficient*	.844**	1.000
		Sig. (2 tailed)	.001	.
		N	90	90

**Correlation is significant at 0.01 levels (2 tailed)
**Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 1 contains the result of bivariate analysis carried out between peer comparison and risk mitigation of maritime companies in Port Harcourt. The result indicates that peer comparison has a very strong and positive correlation with risk mitigation of maritime companies in Port Harcourt (r = .844**) and the symbol ** indicates that this correlation is significant at 0.01 level. Based on this result, the null hypothesis (H03) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is very strong positive and significant relationship between peer comparison analysis and risk mitigation of maritime companies in Port Harcourt.

Hypothesis 2

HO_1: There is no significant relationship between process standardization and risk mitigation of maritime companies in Port Harcourt.

Table 3: Result of bivariate analysis between process standardization and risk mitigation of maritime companies in Port Harcourt.

			Process Standardization	Peer comparison	Risk mitigation
Pearson Correlation (r)	Peer comparison	Correlation coefficient	1.000	.877**	
		Sig. (2 tailed)	.	.001	
		N	90	90	
	Risk mitigation	Correlation coefficient	.877**	1.000	
		Sig. (2 tailed)	.001	.	
		N	90	90	

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-generated Output

Table 2 contains the result of bivariate analysis carried out between process standardization and risk mitigation of maritime companies in Port Harcourt. The result indicates that process standardization has a very strong and positive correlation with risk mitigation of maritime firms in Port Harcourt. (r = .877**) and the symbol ** indicates that this correlation is significant at 0.01 level. Based on this result, the null hypothesis (H_{02}) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is very strong positive and significant relationship between process standardization and risk mitigation of maritime companies in Port Harcourt.

Discussion of finding

The study also revealed a strong and significant relationship between peer comparison and risk mitigation of maritime companies in Port Harcourt. The finding is consistent with the study of Ofoegba and Omoruyi (2021), which demonstrated that benchmarketing against industry peers enhance organizational awareness of operational gas and promotes the adoption of the best practices necessary for minimizing risk in logistics ad supply chain operations. The present study validates these findings by conforming that peer comparison significantly enhance risk mitigation among Maritimes firms, therefore, adopt effective safely and operational standards, and more efficiently to uncertainties in current in maritime activities.

Conclusion

This study investigated the relationship between procurement benchmarketing dimensions; peer comparison, total cost ownership analysis, and process standardization and the supply chain performance of maritime companies in Port Harcourt.

The findings revealed that the dimensions of procurement benchmarketing practices have a strong, and significant and positive relationship with supply chain performance maritime companies.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Maritime companies should institutionalize peer comparison frameworks by periodically benchmarketing their procurement and logistics metrics against industry leaders to identify performance gaps and adopt best practices.
2. Maritime companies should develop and enforce standardized procurement processes, including unified documentation, approval workflows, and supplier assessment criteria to reduce variability and strengthen process control.

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