

SUPPLIER RATIONALIZATION AND COMPETITIVENESS OF INDIGENOUS SHIPPING FIRMS IN NIGERIA**OBOM** Otonye¹**HARCOURT** Horsfall²**NWULU**, Chinyere Stella³¹²³Department of Faculty of Administration and Management Sciences
Rivers State University Nkpolu-Oroworukwo, Port Harcourt**Abstract**

This study examined of the interplay between supplier rationalization and competitiveness of indigenous shipping firms in Nigeria. The study adopted an explanatory research design and collected primary data in a cross-sectional survey. 3,608 registered indigenous shipping firms constituted the population of the study. The Krejcie and Morgan (1970) Table for sample size determination was relied upon to derive a sample size of 351. A structured questionnaire was used to collect primary data. The reliability of the instrument was confirmed via the Cronbach's alpha test. The Spearman's rank order correlation served as test statistic; and was facilitated by the Statistical Package for Social Sciences (SPSS) version 24.0. The study found that supplier rationalization relates to competitiveness of indigenous shipping firms. This is because supplier rationalization showed positive and statistically significant relationship with all the proxies of competitiveness. The study concludes that supplier rationalization relates to competitiveness; and that competitiveness of indigenous shipping firms in terms of responsiveness, operational flexibility, operational efficiency and market leadership depend on supplier rationalization. Hence, the study recommends that indigenous shipping firms in Nigeria that desire improved competitiveness should cultivate and nurture mutually satisfying partnerships with selected suppliers to enjoy relational equity and efficiency. This must however, be consistent with company goals and resources with observed and expected market and marketing trends and opportunities

Keywords: Market leadership, operational efficiency, operational flexibility, responsiveness, supplier rationalization

Introduction

Today's firms' primary challenge is to achieve and maintain sustained competitive advantage in the high-pressured, volatile and highly disruptive operating environment. To overcome this challenge however, firms increasingly realize that they cannot operate as silos, but as entities in a larger convoluted business ecosystem (Riquelme-Medina et al., 2021) where each firm leverage the knowledge and experience of others through partnerships, alliances, and outsourcing to build the competencies they require to enhance their competitiveness. This assertion reinforces the argument of Morgan et al. (2009, as cited in Ateke & Nwulu, 2021) that firms' nearness and ability to obtain, combine and use resources in ways that augment their operating environment is the surest most sustainable route to achieving competitiveness.

A competitive advantage is a requirement for firms that want to survive and post superior performance results. Roman et al. (2012) argue that the key to acquiring a competitive edge in the modern business world is capacity to compete based on ability to reconfigure and refocus on new strategic directions. However, organizational studies literature shows that the competitiveness of a firm is no longer a function of internal processes alone, but mostly the result of a firm's alignment with external supplier who are relied upon for essential resources.

Ni et al. (2021) support the view that firms in recent times, have been more concerned about how to achieve and enhance enterprise competitiveness. Evidence in literature show that strong leadership, Innovation, strong bonds with partners and suppliers, technological renovations, and capital investment as effective routes to promoting enterprise competitiveness (Drobyazko *et al.*, 2019;

Stoyanova & Angelova, 2018; Tan *et al.*, 2017; Orozco *et al.*, 2014). Although “establishing strong relationships with partners and supplier” is identified as one of the ways of achieving competitiveness, the relevance of rationalizing suppliers with a view to optimizing the firms’ procurement spend and leveraging the competences of suppliers is not emphasized.

The turbulent complex business environment created by rapid advances in technology, increased competition and globalization of markets demonstrates that conventional arms-length transactions and peripheral relationship with multiple suppliers is no longer effective for gaining and maintaining competitiveness for enterprises. Instead, firms cultivate, bond with, and invest in few high performing external suppliers with requisite competences and reputation so that they can fully focus on their own areas of competitive advantage; and reallocate scarce resources to strengthen their core product and market position.

The challenge of streamlining the firm’s supplier-base to arrive at a few competent suppliers on whom to rely on and spend scarce resources and from whom to derive better value is addressed through supplier rationalization. *Supplier rationalization* describes a situation where a firm maintains a limited supplier-base that promises or holds better benefits, and focuses on them to provide quality items and components and dependable deliveries (Chen & Paulraj, 2004). Supplier rationalization is an improvement initiative whose relevance and applicability to different types of firms stands prominent, and is widely recognized in literature (Li *et al.*, 2017; Olhager & Prajogo, 2012; Chen & Paulraj, 2004).

This study is designed to examine supplier rationalization and organizational competitiveness. In the succeeding sections, this report presented the baseline theory upon which the study is premised, provides literature on supplier rationalization, organizational competitiveness and proxies of organizational competitiveness. Empirical and anecdotal evidence of the nexus between supplier rationalization and organizational competitiveness was presented, and hypotheses were formulated. The study methodology was presented thereafter; and results, discussion of findings followed. The report ended with a conclusion and recommendations.

Baseline Theory of the Study

This study on global sourcing and supply chain performance is anchored on goal setting theory (Locke & Latham, 1990) which provides that all human activities are predominated by goal-directedness. A goal is desired result towards which efforts are exerted (Locke *et al.*, 1981). In organizational contexts, groups and teams are spurred to direct their activities toward goal attainment. Goal setting theory provides that superior performance results from difficult, but specific goals.

Locke and Latham (2013) contend that goals determine performance levels by influencing over time, the direction of action, degree of effort exerted, and persistence of action. Individuals discern from very early that they need concentration of attention and effort to accomplish a goal, and that they must keep working hard until the goal is attained (Miles, 2012).

Higher goals, strong commitment to reach goals, possession of required resources, and ability and knowledge to achieve goals are essential to increased performance (Locke & Latham, 2013) and enhanced competitiveness. In essence, goal setting provides a mechanism by which firms achieve

results through strategies that specify clear, challenging, complex tasks with feedback loops, and which elicit commitment from individuals, teams or work units.

The thesis of goal setting theory is that superior performance or competitiveness results when the organization assign goals to individuals, groups, or teams, or when they are allowed to determine the goals the organization can achieve (Hollenbeck & Brief, 1987, cited in Miles, 2012). Organizations can increase employees' self-efficacy through competency development programmes that result in improved proficiency in handling challenging tasks (Ateke & Nwulu, 2018), finding role models with whom they can identify, and improving their self-confidence.

Goal setting theory has found wide application in sports and exercise (Kingston & Wilson, 2009); coaching (Gillham & Weiler, 2013; Weinberg, 2010), and urban climate governance (Hofstad & Hansen, 2021). Locke and Latham (2013) opine that the theory has also been applied in public policy and administration studies, as well as in business and organizational studies. Herein, the theory is adopted as a foundational theory based on its thesis that setting proximal and distal goals enhance performance levels; and may inform competitiveness. Hence, Firms can strive to achieve specified challenging goals by employing supplier rationalization.

Concept of Supplier Rationalization

Olhager and Prajogo (2012) preferred a range of improvement initiatives that have the potential to shape firms' internal and external processes. Supplier rationalization whose relevance and applicability to different types of firms stands prominent among these initiatives is widely recognized in literature (Li *et al.*, 2017; Olhager & Prajogo, 2012; Chen & Paulraj, 2004). Supplier rationalization describes a situation where a firm maintains a limited supplier-base that promises or holds better benefits, and focusing on them to provide quality items and components and dependable deliveries (Chen & Paulraj, 2004).

Richard (2013, as cited in Chege & Ochiri, 2019) construed supplier rationalization as studious efforts of firms to determine the right number of suppliers to keep active; and described it as a process that begins with the determination of the optimal number of suppliers a firm should maintain and then focusing on identifying the incumbents to retain in a given materials or service category. Supplier rationalization constitutes an important facet of strategic partnership with suppliers in the firm's value chain; and describes the practice of limiting the firm's supplier-base to a few strategic suppliers that possess the capacity to provide high quality, reliable and dependable service (Li *et al.*, 2017; Chen & Paulraj, 2004).

Reducing the supplier-base to a few carefully selected vendors who can, and are willing to produce and supply high-quality, low-cost components allows the firm to cultivate and nurture mutually satisfying supplier partnerships (Berger *et al.*, 2004, cited in Chege & Ochiri, 2019). Chen and Paulraj (2004) and Narasimhan *et al.* (2001) suggest that supplier-base reduction enables better market penetration and has beneficial effects on business growth.

Literature on supplier rationalization suggests that the concept applies, and is relevant to different firms in different industries (Olhager & Prajogo, 2012). This is based on the conviction that every company require reliable vendors that possess high design flexibility and high quality items delivered at short notice and reliable delivery lead times to support their operations (Li *et al.*, 2017). Overall, the essence of supplier rationalization according to Otieno and Langat (2019) is to facilitate

buying firm's operational performance, through productivity improvements based on robust frameworks that guarantees service deliveries that surpasses customers' anticipation.

Organizational Competitiveness

Competitiveness is the level of effective efficiency with which a firm contrive policies, design programmes and undertakes actions that culminates in meeting product availability, visibility and accessibility; responsiveness to market conditions; and optimal capacity utilization (Wachira et al., 2022; Gunasekaran et al., 2004). A firm is competitive if it possesses the capacity to create and deliver value to critical stakeholders (Verma & Seth, 2010).

Organizational competitiveness requires firms to be pliant; and consistently adjust to changing market structures and conditions (Douglas, 2004). Gunasekaran et al. (2003, as cited in Verma & Seth, 2010) argues that firms become competitive by performing important activities at a lower cost or better than competitors; and that a firm's competitiveness depends on other components (suppliers, manufacturers, and distributors) in its value creation and delivery network.

Chow et al. (2008) states that competitiveness encompass organisational, managerial, technical, and strategic capabilities and skills firms develop over time; and argues that being part of a business ecosystem enable access to a greater pool of expert knowledge, which is key to building organizational competitiveness. Riquelme-Medina et al. (2021) and Alletto et al. (2017) align on the position that collaborative activities in business ecosystems benefit firm's flexibility, agility, market position, patent productivity and efficiency. Thus, business ecosystems create opportunities for individual firms; and by identifying with a business ecosystem, a firm reap benefits that are relevant to improved competitiveness that comes from collective learning experiences (Chow et al., 2008).

The forgoing demonstrates that competitiveness is a relative concept. Alahmad (2021) and Tarafdar and Qrunfleh (2017) suggests that organizational competitiveness can be deconstructed into cost effectiveness, operational flexibility, and product availability and delivery capability, reliable and consistent product delivery, responsiveness to customers' demands, and inventory optimization; Krajewski et al. (2009, as cited in Waithaka & Kimani, 2021) proffered product customization, consistent quality and high capacity utilization; while Cagnazzo et al. (2010 as cited in Wachira et al., 2022) named responsiveness, flexibility, and costs management as dimensions of competitiveness.

However, this study adopted responsiveness, operational flexibility, operational efficiency and market leadership as operational, financial and market performance indicators of competitiveness (Alagarsamy et al., 2021; Omar et al., 2019; Roman et al., 2012). This is in keeping with the conception of competitiveness as operational, financial and market performance rating of a firm. These dimensions also align with view of Deshpande (2012, cited in Alagarsamy et al., 2021, Aggarwal et al., 2020) that competitiveness involve operational, tactical and strategic level measures including, optimal capacity utilization, flexible systems, product availability and delivery capability, inventory and cost optimization, responsiveness to customers' demands, effective distribution planning, and operational flexibility.

Responsiveness

Responsiveness is an emergent notion that spans multiple factors included in value chain activities that span identifying or creating and exploiting opportunities, achieving vitality, and expeditiously

meeting impulsive alterations in customers' demands (Helt et al., 2005, cited in Arimie & Nadube, 2019). Responsiveness is also the ability to respond to customers' needs in terms of quality, speed and flexibility; and represents a competitive capability (Nwulu & Ateke, 2018).

Responsiveness is viewed from service marketing and operations management perspectives. The service marketing perspective looks at responsiveness as willingness to assist customers or provide timely solutions to customers' needs or problems (Holweg, 2005); while from the operations management perspective, responsiveness relates to the speed and variety of products offered to customers (Reichhart & Holweg, 2007). Herein, we adopt an integrated perspective, and adopt the definition of responsiveness as a capacity to exhibit flexibility in providing customers' requirement timeously, while maintaining quality; as well as a willingness to help customers in the value delivery processes (Nwulu & Ateke, 2018).

Responsiveness improve aspects of company performance (Barhmi, 2019; Huo *et al.*, 2018). Nevertheless, Wong and Hvolby (2007) question firms' reactive approaches in cases of extreme demand variation, uncertainty, and seasonality, and called for "coordinated response" to manage and shape customer demand patterns. Overall, extant literature converges on (i) the effectiveness of actions, (ii) timeliness, and (iii) response to market stimuli as three essential properties for responsiveness. In the current study however, responsiveness is treated unidimensionally; and as a measure of organizational competitiveness.

Operational flexibility

To achieve improved visibility, minimize uncertainty and facilitate informed decision-making in good time, companies must develop flexibility that facilitates better response to changing buyers' requirements and other environmental vagaries (Williams et al., 2013). Upton (1994, as cited in Jafari et al., 2022) provides that operational flexibility is the ability of firms to react seamlessly to change without suffering outstanding time, effort, cost and performance penalties. It is a viable management and operational capability that enables adequate and appropriate response to endogenous and exogenous uncertainties that possess the potential to disrupt a firm's business operations (Reichhart & Holweg, 2007).

Operational flexibility has evolved from a product centered idea to a process and system-wide concept (Rojo et al. 2018). In manufacturing contexts, flexibility is pivotal to achieving customer responsiveness (Delic & Eysers 2020), while in supply chain management contexts, flexibility is developed as a capability to facilitate rapid reaction to internal and external vagaries (Williams et al., 2013). Flexibility development efforts thus traverse internal functional areas and organisational boundaries (Gosling et al., 2013); and is seen as a combination of different types of flexibility that buyers require from suppliers; and as a shared responsibility of various functional units and different firms in a value chain.

It is a proactive stance adopted by firms to support processes and improve product availability in a fast changing marketplace (Li et al., 2017; Purvis et al., 2014). Davis-Sramek et al. (2019) contend that when handling demand and seasonality related challenges, firms scarcely find solution within their internal systems; rather, solution is mostly found with suppliers. Operational flexibility allow firms to swiftly and effectively create new products to anticipate market needs, minimize stock-outs, reduce lead-time, and support product customization (Wagner et al., 2018). Flexibility contributes to

developing other competences across the firm, which results to better performance and increased competitiveness (Jafari et al., 2022).

Market leadership

Market leaders are firms with the largest market share and highest profitability prospects in their industry; and which are able to create competitive advantage that translate to performance differentials. Market leaders leverage their industry dominance to influence the direction of the market and to maintain their market leadership companies make efforts to retain current customers and attract new ones.

Market leadership requires development and introduction of products that increases customers' value. Thus, market leaders are customer-centric; they develop clear visions, operate with flexibility and possess high level of environmental awareness. Scholars hold the view that firms clamor for market leadership because of its association with market share and profitability (Rajagopalan et al., 2022; Chepchirchir et al., 2018). Bharadwaj and Varadarajan (1993, as cited in Rajagopalan et al., 2022) supports this view by stating that pioneers and early entrants in new markets often achieve first-mover advantage that results in dominant market shares and sustainable competitive advantage through the creation of entry barriers.

Market leadership in today's business world also requires firms to design and implement proactive customer-focused strategies that confer competitive advantage and long-term survival (Bassell & Lambert, 2018). Ateke and Nwulu (2021) marketing success today requires firms to be innovative, quick to adapt to changing conditions, and resilient. They must possess the competences of agility and flexibility; and must not be tethered to the marketing thinking, programmes, processes, practices or strategies of the past. In addition, market leaders wield significant influence on suppliers, distributors, consumers, competitors and government regulations in an industry (Ateke & Nwokah, 2022).

Supplier Rationalization and Organizational Competitiveness

A firm's suppliers constitute its lifeline. This is irrespective of the size, core business or age of the firm. A well-optimized supplier base enhances the flow of inward and outward resources, hence, confer on firms, added value, reduced risk and collaborative innovation opportunities with best performing suppliers (Jha et al., 2018; Massini et al., 2010).

However, supplier optimization is mostly achieved through supplier rationalization. With a streamlined supplier-base that provides the right quantity and quality of needed materials at the right price, and terms; a firm gets the best possible return on investment, and builds strong strategic supplier partnerships that results in a flexible, responsive, efficient and resilient operations that contribute generously to goal attainment and market position strengthening.

In line with the goal of improving the "bottom line," supplier rationalization also prioritizes cost saving opportunities and value creation; by taking advantage of well-managed supplier relationships (Ogden, 2009). This frequently births a responsive, contingency-aware, data-driven supplier-base that constantly monitors, updates, and refines processes to maximize their performance and compliance; and also minimizes the firm's risk-exposure (Munyimi et al., 2020).

Chege and Ochiri (2019) and Lysons and Gullingham (2013) argue that supplier rationalization builds companies' resilience and agility and fosters business continuity and competitive advantage; better insulate firms against economic shake-ups, natural disasters, and global crises like pandemics. It insulates firms from value-draining problems, improves spend visibility that allows for better financial analysis, forecasting, reporting, and audits (Chege & Ochiri, 2019; Chen & Paulraj, 2004). Supplier rationalization is further credited with improved internal processes that enhance procurement efficiency and improves supply chain processes and competences that engender competitiveness (Olhager & Prajogo, 2012).

Supplier rationalization encourage intimate relationships, foster and entrench trust and cooperation between buying and selling firms, facilitate knowledge development and sharing, and enable firms identify and solve operational issues early (Ragatz et al., 1997, cited in Li et al., 2017). Thus, supplier rationalization when properly and selectively employed enhances responsiveness to customers' needs and drive financial performance (Stanley & Wisner, 2001). Firms also achieve substantial cost savings by minimizing their supplier base and deepening relationships with top-performing suppliers (Guimaraes et al., 2002). Chen et al. (2014) and Li et al. (2017) added that by doing business with a few trusted high performing suppliers, firms avoid problems arising from managing a large supplier-base, working with many sub-efficient suppliers; and also improve their level of competitiveness and performance rating. Thus, supplier rationalization passes as a cogent antecedent to competitiveness of firms.

In view of the above submissions the following hypotheses were formulated:

- H01:** Supplier rationalization has no significant relationship with responsiveness of indigenous shipping firms in Nigeria.
- H02:** Supplier rationalization has no significant relationship with operational flexibility of indigenous shipping firms in Nigeria.
- H03:** Supplier rationalization has no significant relationship with operational efficiency of indigenous shipping firms in Nigeria.
- H04:** Supplier rationalization has no significant relationship with market leadership of indigenous shipping firms in Nigeria.

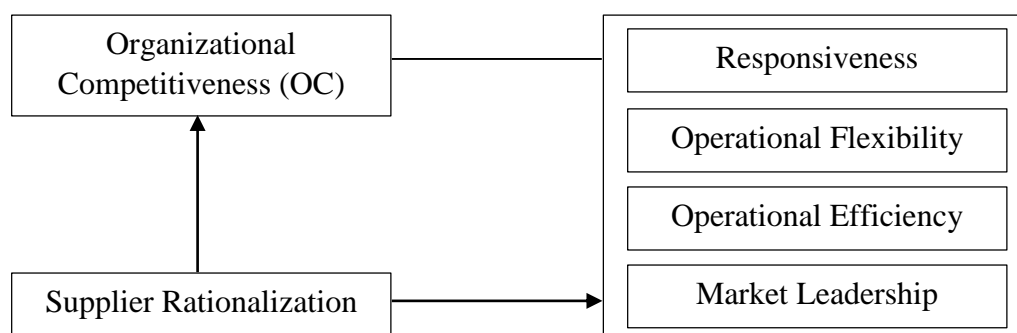


Fig. 1: Conceptual framework of supplier rationalization and organizational competitiveness.

Methodology

This study examined the association between strategic procurement practices and competitiveness of indigenous shipping firms in Nigeria. The study adopted an explanatory research design. The universe of the study comprise 3,608 registered indigenous shipping firms in Nigeria. The information on the number of indigenous shipping firms in Nigeria was obtained from the Nigerian

Maritime Administration and Safety Agency (NIMASA, 2022). The study relied on the Krejcie and Morgan (1970) Table for sample size determination to arrive at a sample size of 351. However, the final analyses was based on 349 usable responses. Primary data for this study was collected from the sample element of the study, using structured questionnaire; and in a cross-sectional survey. The instrument used to collect primary data is a multiple-choice questionnaire designed in the 5-point Likert scale. The reliability of the instrument was determined using “Cronbach’s Alpha test of reliability” with a threshold of 0.70 set by Nunally (1978). A summary of the results of test of reliability is presented in Table 1.

Table 1: Summary of Reliability Results

Variables	Dimensions/Measures	Items	Cronbach’s Alpha
Organizational Competitiveness	Supplier rationalization	6	0.802
	Responsiveness	11	0.811
	Operational flexibility	11	0.701
	Operational efficiency	8	0.705
	Market leadership	8	0.722

Source: Simulation from SPSS output of data analysis on supplier rationalization and competitiveness (2024).

The results show that all the scales in the instruments surpassed the Cronbach’s Alpha reliability threshold of 0.70 as suggested by Nunally (1978). Hence, the instruments is be adjudged reliable, and meets the required minimum standard of precision and clarity. The results demonstrates the scales in the research instruments adequately measure the constructs they are designed to measure. The Spearman’s Rank Order Correlation (a nonparametric statistic) was test statistic used for data analyses.

Results and Interpretation

Table 2: Descriptive Statistics of Items on Supplier Rationalization

My firm:	N	Mean	SD
Rely on a few supplier that possess the capacity to provide high quality products	349	3.1920	1.09721
Rely on a few highly reliable and dependable suppliers	349	3.6304	1.18336
Transact only with suppliers that contribute to your competitive performance	349	3.4728	1.11802
Rely on a small number of highly performing suppliers	349	3.4928	1.07602
Rely on a few supplier that have the competence to meet your procurement needs	349	3.6418	1.11189
Rely on a small number of suppliers that produces high-quality low-cost components	349	3.2321	1.00602
Valid N (listwise)	349		

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

Table 2 summarized results of descriptive analysis on supplier rationalization. The Table demonstrates that test units affirm to all statements on supplier rationalization as true representations of their practices. The distribution reveals a dominant frequency of manifestation for the variable given the distribution of frequency distributions for the statements and their corresponding mean coefficients (where $x > 2.0$). Thus, the evidence supports the position that indigenous shipping firms in many ways engage in supplier rationalization.

Table 3: Descriptive Statistics of Items on Responsiveness

My firm:	N	Mean	SD
Responds swiftly to customers' needs	349	3.5272	1.05181
Has flexible processes that meets changes in customers' requirements	349	3.3868	1.17539
Is always willingness to assist customers	349	3.4069	1.18930
Provide timely solutions to customers' needs or problems	349	3.2636	1.05828
Offers a variety of products to customers	349	2.7307	1.24647
Reacts swiftly and seamless to market intelligence about current and future needs of buyers	349	2.9312	1.27796
Reacts swiftly to threats in the environment	349	3.4183	1.02683
Reacts swiftly to opportunities in the environment	349	2.8183	1.21975
Has the capacity to address internal issues speedily	349	2.0983	1.17184
Reacts quickly react to competitors' moves	349	3.2636	1.09183
Valid N (listwise)	349		

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

Table 3 presents the result of descriptive analysis of items on responsiveness. It showed that respondents affirm to all statements as being evident. The distribution reveals a dominant manifestation of the concept given the frequency distributions for the statements and their corresponding mean coefficients (where $x > 2.0$). As such the evidence shows that respondents agree to the prevalence of responsiveness among indigenous shipping firms in Nigeria.

Table 4: Descriptive Statistics of Items on Operational Flexibility

My firm:	N	Mean	SD
Apply combinations of resources at hand for new operations	349	3.5845	1.13810
Use existing resources to respond to a new problem or opportunity	349	2.8711	1.26309
Improvise solutions from existing resource to solve new challenges	349	3.3696	1.24490
Apply combinations of existing resources to deal with new challenges	349	3.2837	1.32279
Find it difficult to switch from one use of a resource to an alternative	349	3.3381	1.00588
Require limited time to switch to alternative resource use	349	3.4413	1.15724
Exploit changes in environmental trends to improve your operations	349	3.5501	1.14768
Reconfigure resources to develop and deliver better customer value	349	3.5530	1.09632
Deploy resources through structures that support your strategies	349	3.2407	.89343
Have a range of alternative uses to which a resource can be applied	349	3.6246	1.14197
Optimize operational capabilities in response to customers' demands	349	2.9815	1.29340
Valid N (listwise)	349		

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

The outcome of the analysis on operational flexibility as presented in Table 4 shows that most respondents affirm to evidence and manifestations of operational flexibility in their organizations. The results show that respondents affirm to all statements reflecting operational flexibility and agreeing to a moderate extent (where $2.0 < x \leq 4.0$) that operational flexibility is prevalent in their firms.

Table 5: Descriptive Statistics of Items on Operational Efficiency

My firm:	N	Mean	SD
Operates with little or wastage	349	3.5158	1.08722
Engage in high level of control of costs of operations	349	3.6791	1.11939
Streamline operations to reduce unnecessary expenses	349	3.2464	1.02386
Minimize resource consumption	349	3.3037	1.14947
Improve operational processes to run on less cost	349	2.8997	1.18114
Use resources in ways that minimize costs and wastages	349	3.5673	1.14679
Use technology and expertise in ways that reduce cost and wastage	349	2.2636	1.17539
Valid N (listwise)	349		

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

Table 5 describes respondents' experiences concerning the operational efficiency of their firms. The Table shows that respondents identify with all statements addressing operational flexibility. Their position indicates the prevalence of efficiency in the operations of indigenous shipping firms. This position is based on the evidence that all the mean coefficients of responses to all the statement items surpassed the established threshold (where $x > 2.0$).

Table 6: Descriptive Statistics of Items on Market Leadership

My firm:	N	Mean	SD
Has the largest market share in the industry	349	3.1920	1.09721
Has the highest profitability prospects in the industry	349	3.6304	1.18336
Is the most dominant player in the industry	349	2.8997	1.18114
Enjoy more market power than rivals	349	3.4928	1.07602
Maintain leadership position in the industry over a long period of time	349	3.6418	1.11189
Successfully influence the pricing of its service	349	3.2321	1.00602
Leads the industry in the most innovative ideas	349	3.0324	.99721
Most customer-focused firm in the industry	349	2.9328	1.09624
Valid N (listwise)	349		

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

Table 6 presents the result of descriptive analysis on market leadership as a measure of competitiveness. The items in the Table assess respondents' experience concerning how well their firms are leaders in the industry. Table 6 shows that respondents identify with all statement items on market leadership. The position of the respondents indicate that market leadership is prevalent marker of competitiveness considered among indigenous shipping firms in Nigeria. This position is premised on the evidence that all mean coefficients of responses to all the statement items surpassed the established threshold (where $x > 2.0$).

Table 7: Relationship between Supplier Rationalization and Metrics of Competitiveness

			Supplier Rationalization	Responsiveness	Operational Flexibility	Operational Efficiency	Market Leadership
Spearman's rho	Supplier Rationalization	Correlation Coefficient	1.000	.642**	.701**	.747**	.690**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	349	349	349	380	349
	Responsiveness	Correlation Coefficient	.642**	1.000	.708**	.679**	.718**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	349	349	349	349	349
	Operational Flexibility	Correlation Coefficient	.701**	.708**	1.000	.756**	.697**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	349	349	349	349	349
	Operational Efficiency	Correlation Coefficient	.747**	.679**	.756**	1.000	.720**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	349	349	349	349	349
	Market Leadership	Correlation Coefficient	.690**	.718**	.697**	.720**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	349	349	349	349	349

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS output of data analysis on supplier rationalization and competitiveness (2024).

Table 7 displays the result of test of significance of relationship between supplier rationalization and measures of competitiveness. The evidence establishes supplier rationalization as a significant antecedent to responsiveness ($\rho = 0.642$; $p = 0.000$), operational flexibility ($\rho = 0.701$; $p = 0.000$), operational efficiency ($\rho = 0.747$; $p = 0.000$), and market leadership ($\rho = 0.690$; $p = 0.000$). This results demonstrates that supplier rationalization has strong positive and statistically significant correlation with competitiveness of indigenous shipping firms in Nigeria. In view of the strength and direction of relationship shown from the evidence of the results of the tests, the null hypotheses (H_{01} - H_{04}) earlier formulated are all rejected. The study thus states that supplier rationalization has significant relationship with responsiveness, operational flexibility, operational efficiency and market leadership of indigenous shipping firms in Nigeria.

Discussion of Findings

The empirical tests carried out to situate the link between supplier rationalization and metrics of competitiveness produced rho coefficients that demonstrate the existence of strong positive relationship between the variables, and probability values showed that the relationship between supplier rationalization and metrics of competitiveness of indigenous shipping firms in Nigeria statistically significant.

The outcome of our empirical tests show that supplier rationalization relates to, and is antecedent to the manifestation of properties of competitiveness of indigenous shipping firms in Nigeria. These findings support the view that supplier-base reduction enables better market penetration and has beneficial effects on business growth (Chen & Paulraj, 2004; Narasimhan et al., 2001). This is based on the belief that a few reliable vendors that possess high design flexibility and reliable delivery lead times to support their operations (Li et al., 2017) are enables better adaptation and competitiveness of firms.

Our findings corroborate the idea that Chege and Ochiri (2019) that supplier rationalization is management invention that responds to consumers' requirement for higher quality products, wider

variety and assortment of products, faster time to market and prompt deliveries. It also align with the position of Otieno and Langat (2019) and Waters (2017) that to supplier rationalization improves operational performance and resilience of buying firms by supporting productivity improvements based on guaranteed service deliveries that surpasses customers' anticipation.

The findings of the current study support the submission that supplier rationalization enable firms gain sustainable operational distinctiveness and competitiveness of buying firms as it supports operational strategies that result in the attainment of its vital operational objectives; including cost and waste reduction, flexible production system, timely innovation and quality of products (Ateke & Nadube, 2017). The position of Jha et al. (2018) and Massini et al. (2010) that a well-optimized supplier base enhances inward and outward flow of resources and provides added value, reduced risk and collaborative innovation opportunities for firms is also supported by the findings of the study.

The foregoing discussion strengthens our findings that supplier rationalization is a cogent driver of competitiveness of firms, and adequately situates them within extant literature. It therefore holds that supplier rationalization can be relied upon by indigenous shipping firms in Nigeria that desire stronger competitive position in their industry. By ensuring that a buying firm sources supplies from a carefully selected high-performing vendors with capacity to deliver required material at the right time confer several benefits that contribute to desired organizational outcomes, including competitiveness.

Conclusion and Recommendations

This study focused on concept of supplier rationalization and organizational competitiveness of indigenous shipping firms in Nigeria. The results obtained from the statistical analyses showed that supplier rationalization is associated with superlative performance differentials (competitive advantage). It enhances flow of resources, confer added value, reduces risks and wastes and provides opportunities of collaborative innovation. A streamlined supplier-base informs flexible, responsive, efficient and resilient operations that contribute generously to goal attainment, strong market position and improved profitability.

In view the forgoing, the paper concludes that supplier rationalization facilitate the attainment of organizational competitiveness through responsiveness, operational flexibility, operational efficiency and market leadership; and that competitiveness (responsiveness, operational flexibility, operational efficiency and market leadership) on indigenous shipping firms in Nigeria depends on studious supplier rationalization.

The study therefore recommends that indigenous shipping firms in Nigeria should be proactive and decisive in rationalizing their supplier base, and focus on a limited number that are capable of providing quality items and components and dependable deliveries with a view to harnessing its beneficial effects on business growth. They must also cultivate and nurture mutually satisfying partnerships with the selected suppliers to enjoy relational equity and efficiency. This must however, be consistent with company goals and resources with observed and expected market and marketing trends and opportunities.

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