

Strategic Innovation Management And Organizational Resilience Of Maritime Firms In Rivers State

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ABSTRACT: *This study investigated the relationship between strategic innovation management and organizational resilience among maritime firms in Rivers State, Nigeria. Using a cross-sectional survey design, data were obtained from 73 managers and supervisors selected through simple random sampling from a population of 90. Strategic innovation management was measured via business networking, flexible resource allocation, creativity development, and integrated management process, while organizational resilience served as the dependent variable. Data were collected using a structured 4-point Likert scale questionnaire and analyzed with Spearman's Rank Order Correlation Coefficient. Results revealed significant positive relationships between all dimensions of strategic innovation management and organizational resilience: business networking ($p = 0.581, p < 0.01$), flexible resource allocation ($p = 0.622, p < 0.01$), creativity development ($p = 0.453, p < 0.01$), and integrated management process ($p = 0.513, p < 0.01$). Flexible resource allocation had the strongest effect, highlighting its role in operational agility. The study recommends strengthening industry networks, establishing rapid resource reallocation frameworks, investing in creativity programs, fostering innovation-friendly cultures, and integrating management processes to enhance resilience and competitiveness in the maritime sector.*

Keywords: Strategic Innovation Management, Organizational Resilience, Business Networking, Flexible Resource Allocation

1.0 Introduction

The maritime sector is central to global trade and economic growth, serving as a key facilitator of import and export activities. In Nigeria, and particularly in Rivers State, the industry is of strategic importance due to its coastal location, oil and gas operations, and major port facilities in Port Harcourt and Onne. However, maritime firms in the region face persistent challenges, including infrastructural deficits, regulatory pressures, technological disruptions, security threats, and intense global competition. Therefore it becomes necessary to have proactive and adaptive measures in place to enhance competitiveness and long-term viability. According to Eketu (2015), organizational resilience is an intentional effort and planning process of business owners and management of organizations in ensuring the smooth flow of functions and operational irrespective of the disruptions that may occur in the course of their business operations being it internal or external factors. In the same vein, Duchek (2019) opined that resilience of organizations involves the defensive approach undertaken by organization in the resistance to uncertainties that business operations faces and making sure that these uncertainties does not disrupt the operations of the business.

Furthermore, Onyokoko and Onuoha (2021), regarded organizational resilience as the possession of capabilities and skill of an organization to regain positive posture following adversity, frustration, and misfortune in order to ensure the effectiveness of such organization. Rexhepi and Modenesi (2016), sees firms resilience as the capacity of an organization to handle crisis and its ability to also react to unexpected interruption in the business operation. They further noted that only resilient companies gain competitive advantage over competing firms through the enhancement of its internal mechanisms as well as the adaptation to external changes. From the above assertions, this study therefore posit that organizational resilience is the capacity of firms to anticipate, withstand, adapt to, and recover from disruptions in ensuring operational continuity and sustainable performance.

However, because of the importance of resilience to organizations, many factors have been examined in an attempt to enhance the resilience of firms. Therefore, this is looking at how strategic innovation management can be used in a bid to enhance the resilience of maritime firms in Rivers State. Strategic innovation management, which entails the systematic identification, development, and application of novel ideas, processes, and technologies aligned with organizational goals, has become essential for navigating dynamic business environments. In the maritime industry, such innovations may encompass digital port operations, green shipping technologies, advanced logistics systems, and data-driven customer service models. Jin, et al, (2004) defined strategic innovation as a future-focused business development framework that identifies breakthrough growth opportunities, accelerates business decisions and creates near-term, measurable impact within the context of a longer-term vision for sustainable competitive advantage.

Strategic innovation management challenges an organization to look beyond its established business boundaries and mental models and to participate in an open minded, creative exploration of the realm of possibilities (Ejo-Orusa & Adim, 2019). Strategic innovation is one of the fundamental instruments of growth strategies used to enter new markets, to increase the existing market share and to provide the company with a competitive edge (Nybakk & Jenssen, 2012). Strategic innovation management, refers to the entire set of innovative practices involving the analysis of competition mechanisms, such as creating an innovative vision,

harmonizing business strategy, expanding the strategy to all organizational levels, market tendencies, technologies and competitor acts (Sanchez, et al., 2011). Strategic innovation management refers to firms managing technology, business processes (customers, suppliers, financial and external resources, etc.) and human relationships (culture, communication, organization, etc.) in a way that will support and encourage innovation. In this context, the success of innovation depends on owned resources (human, equipment, technology, information, etc.) and the ability of the organization to manage these resources (Ejo-Orusa & Adim, 2019).

Strategic innovation management is seen as a set of innovation practices which entails the analyses of competition mechanisms. It involves the crafting of business strategy, working towards the strategy to include all corporate levels, market tendencies, technologies and acts of competitors (Sanchez, et al., 2011).

Evidence suggests that resilience is strengthened when organizations embed innovation into their strategic and operational frameworks, enabling them to respond effectively to market volatility, regulatory shifts, and environmental uncertainties. However, despite the crucial role of strategic innovation management and organizational resilience, empirical research linking these constructs within the maritime context in Nigeria remains limited. This study therefore seeks to examine the link between strategic innovation management and organizational resilience among maritime firms in Rivers State.

Statement of the Problem

The maritime industry in Rivers State operates within an increasingly complex and volatile environment shaped by economic fluctuations, technological advancements, environmental concerns, regulatory changes, and security threats such as piracy. These challenges not only disrupt operational efficiency but also threaten the long-term sustainability of maritime firms in the region. While strategic innovation management offers a pathway for organizations to anticipate market changes, enhance competitiveness, and create value, many maritime firms appear to adopt innovation in a reactive rather than proactive manner, limiting its potential impact. According to the submission of Obed, et al., (2017), the Nigerian maritime sector lacks the knowledge-base and intellectual abilities to meet with the ever-growing demanding responsibilities in the industry. Some of the issues that have exacerbated the maritime sector's business climate include insufficient berthing space, sea piracy difficulties, vessel delay challenges, insufficiently performing plants, operational and procedural delays, and outdated equipment and plants.

Apart from the competitive pressures in the maritime sector, which have harmed certain companies' survival, the unanticipated economic crisis has altered existing business and maritime sector narratives, harmed company survival, and elevated corporate resilience to a key quality for today's firms. Furthermore, without a clear understanding of the link between strategic innovation management and organizational resilience, maritime firms in Rivers State risk reduced competitiveness, operational breakdowns, and vulnerability to crises in an increasingly unpredictable global maritime landscape. Organizational resilience, which is critical for navigating uncertainty and sustaining performance, remains underdeveloped in many firms due to inadequate integration of adaptive strategies, limited technological adoption, and insufficient risk management structures. Although theoretical and empirical evidence suggests that strategic innovation can enhance resilience, there is limited scholarly inquiry into this relationship within Nigeria's maritime sector, particularly in Rivers State. This knowledge gap is what have informed this study to examine the relationship between strategic innovation management and resilience of maritime firms in Rivers State.

Aim and Objectives of the Study

The aim of this study is to examine the link between strategic innovation management and resilience of maritime firms in Rivers State. Specifically, the objectives of the study are as follows:

- i. Examine the relationship between Business Networking and resilience of maritime firms in Rivers State.
- ii. Find out the link between Flexible Resource Allocation and resilience of maritime firms in Rivers State.
- iii. Explore the relationship between Creativity Development and resilience of maritime firms in Rivers State.
- iv. Determine the relationship between Integrated Management Process and resilience of maritime firms in Rivers State.

Research Hypotheses

- H₀₁:** There is no significant relationship between Business Networking and resilience of maritime firms in Rivers State.
- H₀₂:** There is no significant relationship between Flexible Resource Allocation and resilience of maritime firms in Rivers State.
- H₀₃:** There is no significant relationship between Creativity Development and resilience of maritime firms in Rivers State.
- H₀₄:** There is no significant relationship between Integrated Management Process and resilience of maritime firms in Rivers State.

2.0 Literature Review

Strategic Innovation Management

Finding a better method to accomplish something is what is meant by innovation, which is the process of turning an idea or invention into a good or service that adds value or that consumers are willing to pay for (Frame & White, 2024). Innovation can be defined as the use of improved solutions to address unmet needs, unstated needs, or current market demands. Innovation is achieved when markets, governments, and society have easy access to efficient goods, procedures, services, technology, or concepts. Something unique and, hence, novel that enters the market or society is referred to as innovation (Frankelius, 2019). An organization's propensity to test out novel concepts and encourage creative processes that come before rivals' moves is known as its innovativeness. It is an idea that focuses on the organization's creative tendencies through the coordinated actions of its employees and research endeavors (Coulthard, 2020). According to Grant (2023), innovation is the process of creating new processes, solutions, goods, and services as well as new ways to market them to the company's suppliers, consumers, and other stakeholders. Innovation includes the different creative ways to improve the nature of the product or service, as well as the manufacturing and delivery processes. According to Hartley (2020), innovation is the effective creation, application, and utilization of novel or structurally enhanced goods, procedures, services, or organizational structures.

Implementing novel concepts, procedures, goods, or services is referred to as strategic innovation (Bitar, 2023). In the context of a longer-term vision for sustainable competitive advantage, strategic innovation is a future-focused framework for business development that finds ground-breaking growth opportunities, speeds up business decisions, and produces immediate, quantifiable impact (Jin, Hewitt, & Thompson, 2024). An organization is challenged by strategic innovation to go beyond its preexisting business boundaries and mental models and to engage in an imaginative, open-minded investigation of the world of possibilities. An organization's potential to outperform competitors by producing greater value over time is what makes strategic innovation so important (Jin et al., 2024).

One of the key tools of growth plans is strategic innovation, which gives the business a competitive edge, expands its market share, and opens up new markets (Nybakk and Jenssen, 2022). Companies have begun to understand the significance of strategic innovation as a result of fierce global rivalry and rapidly evolving technology, which quickly reduce the value added of current goods and services. This realization is driven by the growing competition in global marketplaces. Therefore, for a number of reasons, including applying more efficient processes, performing better in the market, aiming for a favorable reputation in the eyes of customers, and ultimately gaining a sustainable competitive advantage, strategic innovations are an essential part of corporate strategies. Innovations provide firms a strategic orientation to overcome the problems they encounter while striving to achieve sustainable competitive advantage (Hitt, et al., 2021).

According to Varadrajana (2018), strategic innovation is the process of creating value by utilizing pertinent information and resources to transform an idea into a new process, product, or practice that could significantly alter the way markets and industries develop. Creating value through the use of novel game techniques to obtain a competitive edge is the goal of strategic innovation (Afuah, 2009). The development of new product categories, services, business models, or growth strategies that alter the market and produce substantial new value for customers, clients, and the company is known as strategic innovation (Si & Kavadias, 2023).

Dimensions of Strategic Innovation Management

Business Networking

According to Birley and Muzyka (2020), business networking is a management approach that involves pursuing opportunities without considering available resources. The term "network" refers to the relationship between members of a networking club, regardless of whether they work in the same trade or another (Aladejebi, 2020). A network is the gathering of organizations and individuals who may help others in the network with their knowledge and abilities. Networks are complex systems that are constructed around a set of objectives that guarantee both flexibility in execution and unity of purpose.

Businesses benefit from networking because it can lead to important opportunities, information, and support that can make the difference between a successful and unsuccessful endeavor (Cote, 2022). As a business grows, an organization can build a network that opens doors, cooperates, coordinates, and provides support; they can also look for networking activities that match their area of expertise and maintain relationships; a strong network can help them get funding, connect with the right employee, attract board members, get much-needed advice, and provide support when the burden of running a business becomes too much to handle. Before joining a network, it is crucial to determine your objectives, the precise business goal you have in mind, the solution to a problem, and the reasons you wish to connect with other companies in the same industry. (Kiesh, 2022). Networking is essential for business in today's globalizing world (Leevi, 2019). Business networking, according to Toivola (2020), is a social process where value, information, and expertise are combined to create an activity that adds value. According to Das and Goswami (2019), small businesses need help and resources from other sources, including other businesses, support organizations, and friends and family.

Networking is frequently regarded as a crucial strategy for SMEs to take advantage of their competitive disadvantage, according to Crowley and Halford (2018).

According to Baghdiantz-McCabe, et al., (2020), business networks are patterns of interpersonal relationships that arise from business activity. In these networks, the players in a firm's daily operations interact with a variety of other players, all of whom are crucial to the firm's operation. The sum of all the connections that businesses create and utilize as an essential resource for their operations is known as their business networks (Renjen, 2021). Businesses that are explicitly established to increase the efficacy of its members' commercial operations are also referred to as business networks (Das & Goswami, 2019). These business actors must be adept at networking in order to be resilient. Ritter & Gemunden (2023) define network competence as an organization's ability to use, control, and influence inter-organizational linkages. People who are connected or related in some way form networks. Those who describe by returning favours extended by group members. They utilize centralized resources and provide the group their fair share as well (OECD & European Commission, 2019).

Flexible Resource Allocation

By matching resources to emerging demands rather than letting assets sit idle, flexible resource allocation, the ability to swiftly transfer people, money, inventory, and technology between units, improves an organization's capacity to withstand shocks. Adaptive capacity is supported by flexible allocation: companies that regularly reallocate resources in response to early indications (such as supplier breakdowns or changes in demand) develop the ability to respond to future shocks more quickly and efficiently. Empirical studies have linked increased organizational resilience to resource flexibility, which is a tangible manifestation of dynamic capacities in identifying opportunities and dangers, exploiting them by rearranging assets and transferring resources (Vidal et al., 2024).

By converting fixed costs into semi-variable or scalable costs, flexible resource allocation lessens fragility; this financial agility decreases the marginal cost of pivoting amid disruption. Businesses that implement governance, decision-rules, real-time dashboards, and reallocation processes increase the efficacy of flexibility by completing reallocations more quickly and with fewer mistakes. Flexibility improves absorptive capacity: businesses can reduce recuperation cycles and speed up problem-solving by reallocating R&D, training, or knowledge resources to urgent learning demands (Martinez & Santos, 2024).

By facilitating the quick funding of new value streams (such as switching to contract manufacturing or e-commerce) as markets change, flexible allocation also enhances strategic resilience, which is the capacity to modify business models. Resource flexibility and sustainability performance work together: companies with robust ESG/sustainable processes tend to have operational wiggle room and stakeholder trust, which lowers the cost and increases the acceptability of reallocations. In conclusion, flexible resource allocation is a high-leverage capability rather than a cure-all. When managed, sensed, and combined with dynamic capabilities, it significantly boosts organizational resilience by facilitating quick, efficient reactions and strategy shifts (Roberts & Taylor, 2025).

Creativity Development

According to Kumanwee (2018), creativity is the art of posing issues and coming up with appropriate answers. According to Runco and Jaeger (2022), creativity is the capacity to think creatively and come up with novel, useful solutions that are appropriate for resolving issues or seizing opportunities. The wide range of definitions that are available is unquestionably a result of the remarkable pluralism that defines the field of creativity research, wherein a variety of theoretical perspectives, operating at different levels of analysis and with varying assumptions and methods, all ideally contribute to a more robust, contestable understanding of human creativity (Kozbelt, Beghetto & Runco, 2020).

According to Amabile (2023), creativity is the process of coming up with an idea or addressing a problem and then coming up with a real answer. Organizational success is greatly impacted by creativity, and in the case of service organizations, frontline staff' creativity is even more important. Businesses require innovative competition, particularly in light of the capital employees' difficulties in launching organizational innovation. It has been demonstrated that innovation is crucial to an organization's success. By offering employees the freedom to choose how they want to accomplish their goals and providing them with feedback on how they did so, the organization may foster their creativity and improve performance beyond their wildest expectations (Dvir, et al., 2022). To start organizational innovation, businesses require innovative workers. It is acknowledged that the primary element in creating a competitive advantage is employee inventiveness. Employee innovation provides a competitive advantage, which benefits a business in a number of firm-level financial performance metrics. Innovative practices give businesses a competitive edge and improve performance (Shelley, et al., 2023). Businesses that foster innovation see higher profit growth and, in turn, improved firm performance.

The ability to create something new, whether it is a novel solution to an issue, a novel tool or process, or a novel item or kind of art, is referred to as creativity. However, Sart (2023) characterizes creativity as something special and practical. Seeing something that

everyone else sees and linking it in ways that no one else has is the act of creativity. The familiar is giving way to the unknown in terms of creativity. Weigel et al. (2024) claim that culture inhibits creativity.

Integrated Management Process

Olaru et al. (2019) define an Integrated Management System (IMS) as "A management system which connects all components of a business into one comprehensive system to enable the achievement of its strategy". In conclusion, the IMS integrates all essential management system components to harmonize and meet the always evolving and growing needs of clients in a way that is economical, secure, and ecologically responsible. The latter is accomplished in accordance with the overall business plan and within the necessary legal and regulatory framework. According to Garengo and Biazzo (2023), the IMS uses a network of interrelated management tools to connect strategy and operations. Generally speaking, an Integrated Management System (IMS) is essential for overseeing the operations and procedures that convert resources into goods and services that satisfy the goals of the company. It also guarantees the equitable fulfillment of stakeholder requirements. IMS gives businesses a management philosophy that helps them accomplish their goals and efficiently manage processes (Hernandez-Vivanco et al., 2018).

Increasing organizational efficiency and, in turn, corporate success are only two of the many advantages that come with integrating multiple management systems (Saad, 2024). There are two kinds of IMS: those that concentrate on risk reduction and those that concentrate on cost and process improvement. Both are essential for improving interfunctional communication and the documentation and analysis of the audit process. Both externally supplied and common management system components must always be included in IMSs. This is true for all other systems, not just IMS, and they usually make up 80% of the burden for common elements. A important argument for their integration is based on this feature (Bian, 2021).

As a result, the IMS concept entails the integration of various management systems used by organizations. As the number of management systems grows, it is critical to discuss how these disparate systems can be integrated to effectively accomplish the organization's goals. As defined, IMS is a collection of critical quality standards that includes traditional quality management systems (ISO 9001), environmental management systems (ISO 14001), information security management systems, business continuity management systems (ISO 22301), and energy management systems (ISO 50001). These systems have been consolidated into a single certification body known as IMS certification over time (Khudhair et. al., 2019).

Organizational Resilience

The ability of an organization to predict important events based on new patterns, adjust to change continuously, and recover quickly from adversity is known as resilience. The corporate environment is rapidly become more linked, dynamic, and unpredictable, and the effects of outside events are becoming more significant. You run the risk of falling behind if you react improperly or too late. The idea of resilience has drawn a lot of attention in the past three decades as companies attempt to deal with the ever-changing environment. During this time, the emphasis was on systems' capacity to adapt to environmental changes and endure (Petak, 2022). Resilience is the ability of a system to withstand disruption and reorganize while changing while maintaining the same function, structure, identity, and feedback (Walker et al., 2024). The ecologist's perspective of renewal and reorganization differs significantly from the materials science equilibrium understanding of resilience. A developmental psychology viewpoint is helpful for comprehending how resilience develops in organizations, which is more consistent with renewal. According to this viewpoint, resilience is a gradual process that arises from consistently managing risks, stresses, and strains. In this process, an entity not only survives and thrives by adapting positively to current adversity, but also fortifies its capacity to adapt in the future (Sutcliffe & Vogus, 2023).

Organizational resilience has been demonstrated to have a favorable relationship with company performance in addition to its influence on innovation. According to a Teece (2024) study, resilient firms have a higher chance of sustaining profitability and gaining a competitive edge over the long run. Similarly, resilient businesses were better equipped to withstand financial crises and sustain high performance levels, according to a study by Weick and Sutcliffe (2020). Resilient organizations can maintain a competitive edge over time because they are better equipped to retain essential resources and talents. Another element is the ability of resilient firms to build and maintain strong relationships with key stakeholders, such as suppliers, customers, and employees. By establishing solid and reliable partnerships, resilient businesses are better equipped to adjust to changes in the business environment and maintain high performance levels over time (Hillmann & Guenther, 2021; Saad et al., 2021).

Theoretical Framework: Dynamic Capability Theory

Dynamic Capabilities Theory was introduced by David J. Teece, Gary Pisano and Amy Shuen (1997) in their influential Strategic Management Journal article. They positioned dynamic capabilities as higher-order firm capabilities that enable sensing opportunities/threats, seizing opportunities, and reconfiguring resources to achieve sustainable competitive advantage in changing environments. DCT assumes that possession of resources (RBV) is insufficient in dynamic environments; firms need routines and

processes that purposefully create, extend, and modify their resource base. Also, capabilities are historically embedded and evolve through learning and managerial activities (deliberate learning, routines). Managerial decisions matter for building and deploying dynamic capabilities (Schilke et. al., (2018).

Scholars have criticized DCT for being loosely defined and used to mean many different things (a “capability” catch-all). Reviews show inconsistent operationalizations across studies, making cumulative knowledge harder. Critics note circularity: if dynamic capabilities are defined by positive firm outcomes, then claiming DCs cause performance risks tautology unless carefully measured as specific routines/processes. The dynamic capabilities view (DCV) is generally considered an extension of RBV (Haarhaus & Liening, 2020; Rodrigues et al., 2021) as it addresses the limitations of RBV (Weaven et al., 2021). Rodrigues et al. (2021) suggests that RBV and DCV explain that an organization’s core competencies consist of intangible and tangible resources which derive from the organizations, in contrast to non-core competencies which can be acquired externally. RBV together with DCV, is seen as driving forces for survival and growth of SMEs in a dynamic environment. Therefore, there is a need for CEOs of SMEs to not overlook these paradigms (Rodrigues et al., 2021).

Contingency Theory

Contingency Theory emerged in the 1960s–1970s in organizational studies. Key contributors include Joan Woodward (1965), who linked production technology to structure; Paul Lawrence and Jay Lorsch (1967), who linked environmental uncertainty to differentiation and integration; and Fred Fiedler (1964, 1967), who applied it to leadership effectiveness. In strategic management, contingency thinking became central to explaining why “no single best way” exists to manage effectiveness, depending on the fit between organizational characteristics and contextual factors. The theory assumes that Changes in environmental factors (e.g., market turbulence, regulatory shifts) require structural and strategic adaptation to maintain fit. Also, Leaders must diagnose contingencies and adapt organizational arrangements accordingly.

Critics argue early contingency models treated fit as a static end-state, underestimating the dynamic, ongoing process of adaptation (Donaldson, 2001). Some critics say it oversimplifies reality by isolating a few contingency variables, whereas firms face multiple, interacting contingencies. In innovation contexts, overfitting to current contingencies may reduce exploratory capacity and long-term adaptability (El Baz & Ruel, 2021). In today’s business world, this theory provides a framework for aligning innovation processes with industry turbulence, technology cycles, and competitive pressures. It also guides firms in matching crisis responses to the type and speed of disruption (Xie et. al., 2023).

Empirical Review

Ejo-Orusa and Adim (2019) investigated the moderating role of organizational structure on the relationship between strategic innovation management and organizational survival in selected hotels in Port Harcourt. Adopting a correlational cross-sectional design, the study drew data from 166 valid responses obtained through structured questionnaires administered to managers, supervisors, and unit heads. Reliability was confirmed through Cronbach Alpha coefficients of 0.70 and above. Using Spearman’s rank correlation, the results showed a positive and significant relationship between strategic innovation management and organizational survival. Further analysis with zero-order partial correlation revealed that organizational structure significantly moderated this relationship. The authors recommended that hotels adopt less formalized, less centralized, but more professionalized and managerially intensive structures to enhance responsiveness to environmental changes.

Promise-Elechi and Onuoha (2023) investigated the link between talent development and firm resilience in hotels within Port Harcourt, Nigeria. Employing a descriptive research design, the study conducted a census of 105 hotel managers from 35 hotels, using the Spearman rank correlation coefficient for data analysis via SPSS 21.0. The results indicated a significant positive relationship between talent development and the dimensions of firm resilience, specifically firm robustness and firm agility. The researchers concluded that talent development initiatives, such as training programs, knowledge sharing, and adequate funding, enhance employees’ efficiency and the organization’s adaptive capacity. They recommended that hotel managers actively invest in talent growth to strengthen resilience and suggested that future research adopt qualitative methods, such as QSR Nvivo, to further explore the depth of the relationship between the variables.

Issa (2021) investigated the relationship between innovation and organizational resilience in Nigeria’s maritime sector using a survey design. The study sampled 148 employees from 15 maritime firms, with 109 valid responses analyzed using Pearson product-moment correlation. Innovation was measured through process innovation and market innovation, while organizational resilience was assessed via dynamic capability and agility. Findings revealed a significant positive relationship between both dimensions of innovation and the measures of organizational resilience, indicating that innovation enhances firms’ adaptability and capacity to respond to sectoral challenges. The study recommended continuous adaptation of marketing strategies distinct from competitors to strengthen agility in the maritime industry.

Kazinguvu (2016) examined the integration of strategic innovation in the management of small and medium-sized manufacturing enterprises (SMEs) in Rwanda. Using purposive sampling, SMEs were selected for interviews, with qualitative data collected through self-administered interview guides and analyzed thematically via content analysis. The study found that effective strategic innovation in SMEs is fostered by clearly communicating the organization's vision and strategic targets to employees, encouraging tolerance and learning from risks, mistakes, and failures, empowering operational staff to make timely decisions, and rewarding innovative initiatives. Furthermore, cultivating curiosity beyond routine tasks was identified as a driver for preparing employees for future innovations. The findings underscore that building an innovative organizational culture is essential for SMEs to act on emerging opportunities ahead of competitors.

Ohazulumeh and Onuoha (2023) empirically examined the relationship between strategic flexibility and corporate resilience in food and beverage firms in Rivers State, Nigeria. Adopting a cross-sectional survey design, data were obtained from 89 managers across three food and beverage companies, selected using the Taro Yamane formula from a population of 115 managers. The study employed the Spearman Rank Order Correlation Coefficient to test the hypotheses. Findings revealed a significant positive correlation between strategic flexibility—particularly operational flexibility and human resource flexibility—and corporate resilience. The authors concluded that flexible operational structures and adaptable human resource practices enhance organizational resilience in turbulent environments. Consequently, they recommended that food and beverage firms integrate flexibility into their operations to strengthen resilience against uncertainties.

3.0 Methodology

The study adopted the cross-sectional survey design and the population of the study comprise 90 managers and supervisors of maritime firms in Rivers State. However, the study used a sample of 73 managers and supervisors using the Krejcie and Morgan sample size determination table. The simple random sampling technique was used for the study because it gives room for every member of the sample to be represented and reduced the researcher's bias in selection. The independent variable (strategic innovation management) was measured using business networking, resource allocation, creativity development and integrated management process, while the dependent variable (organizational resilience) was measured as a loan variable. All items were rated on a 4-point likert scale ranging from 1 – 4 representing strongly disagreed to strongly agreed. The data for the study was obtained using structured questionnaire and the data collected was analysed using the Spearman's Rank Order Correlation Coefficient.

4.0 Result

A total of 73 questionnaires were distributed to respondent. Out of the 73 questionnaires distributed, 70 were returned and used for the study. The hypotheses test was undertaken at a 95% confidence interval implying a 0.05 level of significance. The decision rule is set at a critical region of $p > 0.05$ for acceptance of the null hypothesis and $p < 0.05$ for rejection of the null hypothesis.

Table 1: Business Networking and Organizational Resilience

		Business Networking	Organizational Resilience
Spearman's rho	Business Networking	Correlation Coefficient	1.000
		Sig. (2-tailed)	.581**
		N	.000
	Organizational Resilience	Correlation Coefficient	70
		Sig. (2-tailed)	70
		N	.581**
		Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	.

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

Hypothesis 1: There is no significant relationship between Business Networking and resilience of maritime firms in Rivers State.

The Spearman's rho correlation analysis showed a positive and significant relationship between Business Networking and Organizational Resilience ($p = 0.581$, $p < 0.01$). This implies that as maritime firms enhance their networking activities, such as building industry partnerships, fostering client relationships, and maintaining stakeholder connections, their ability to withstand and adapt to challenges also improves. Consequently, the hypothesis, which stated that there is no significant relationship between Business Networking and Organizational Resilience, is rejected.

Table 2: Flexible Resource Allocation and Organizational Resilience

		Flexible Resource Allocation	Organizational Resilience
Spearman's rho	Flexible Resource Allocation	Correlation Coefficient	1.000
		Sig. (2-tailed)	.622**
		N	70
	Organizational Resilience	Correlation Coefficient	1.000
		Sig. (2-tailed)	.622**
		N	70

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

Hypothesis 2: There is no significant relationship between Flexible Resource Allocation and resilience of maritime firms in Rivers State.

The Spearman's rho correlation analysis revealed a strong positive and significant relationship between Flexible Resource Allocation and Organizational Resilience ($\rho = 0.622$, $p < 0.01$). This finding suggests that maritime firms that dynamically allocate and reassign resources in response to operational demands are better equipped to withstand disruptions, adapt to market changes, and sustain performance. Consequently, Hypothesis 2, which stated that there is no significant relationship between Flexible Resource Allocation and Organizational Resilience, is rejected.

Table 3: Creativity Development and Organizational Resilience

		Creativity Development	Organizational Resilience
Spearman's rho	Creativity Development	Correlation Coefficient	1.000
		Sig. (2-tailed)	.453**
		N	70
	Organizational Resilience	Correlation Coefficient	1.000
		Sig. (2-tailed)	.453**
		N	70

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

Hypothesis 3: There is no significant relationship between Creativity Development and resilience of maritime firms in Rivers State.

The Spearman's rho correlation analysis indicated a moderate positive and significant relationship between Creativity Development and Organizational Resilience ($\rho = 0.453$, $p < 0.01$). This result implies that maritime firms that invest in enhancing employees' creative capacities are better positioned to adapt to challenges, develop innovative solutions, and maintain operational continuity. Consequently, Hypothesis 3, which stated that there is no significant relationship between Creativity Development and Organizational Resilience, is rejected.

Table 4: Integrated Management Process and Organizational Resilience

		Integrated Management Process	Organizational Resilience
Spearman's rho	Integrated Management Process	Correlation Coefficient	1.000
		Sig. (2-tailed)	.513**

	N	70	70
Organizational Resilience	Correlation Coefficient	.513**	1.000
	Sig. (2-tailed)	.000	.
	N	70	70

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

Hypothesis 4: There is no significant relationship between integrated management process and resilience of maritime firms in Rivers State.

The Spearman's rho correlation analysis showed a moderate positive and significant relationship between Integrated Management Process and Organizational Resilience ($\rho = 0.513$, $p < 0.01$). This finding implies that maritime firms that adopt a coordinated and unified approach to planning, operations, and decision-making tend to exhibit higher resilience, enabling them to adapt, recover, and sustain performance during challenging periods. Therefore, Hypothesis 4, which posited that there is no significant relationship between Integrated Management Process and Organizational Resilience, is rejected.

Discussion of Findings

Business Networking and Organizational Resilience

The Spearman's rho result ($\rho = 0.581$, $p < 0.01$) demonstrates that stronger business networking activities significantly enhance the organizational resilience of maritime firms. This aligns with Ejo-Orusa and Adim's (2019) findings, where strategic innovation management was positively and significantly linked to organizational survival in the hotel sector, with the relationship strengthened by an adaptable organizational structure. Both studies emphasize that dynamic, outward-looking strategies, whether through networking in maritime firms or innovation management in hotels, improve an organization's capacity to adapt and thrive amidst environmental turbulence. In the current study, business networking functions similarly to strategic innovation management in the earlier study, as both foster access to new information, resources, and opportunities, which, when supported by flexible structures and processes, translate into greater resilience and long-term viability.

Flexible Resource Allocation and Organizational Resilience

The strong positive relationship found between Flexible Resource Allocation and Organizational Resilience ($\rho = 0.622$, $p < 0.01$) aligns with Issa's (2021) findings in the Nigerian maritime sector, where both process and market innovation significantly enhanced dynamic capability and agility. In both cases, the underlying mechanism is adaptability. Issa's study shows that innovation, whether in processes or markets, provides firms with the flexibility to adjust operations and strategies to meet changing demands. Similarly, flexible resource allocation represents a form of operational adaptability, enabling maritime firms to rapidly reassign human, financial, and material resources to critical areas during disruptions. In essence, both innovation and resource flexibility build the same resilience competencies: responsiveness, agility, and sustained performance under uncertainty. Therefore, just as innovation in Issa's study improved organizational agility and capacity to face sectoral challenges, flexible resource allocation in the present study empowers firms to respond quickly to operational shifts, thereby strengthening resilience in turbulent maritime environments.

Creativity Development and Organizational Resilience

The Spearman's rho correlation analysis in the maritime sector study revealed a moderate positive and significant relationship between creativity development and organizational resilience ($\rho = 0.453$, $p < 0.01$). This suggests that when maritime firms deliberately enhance employees' creative capacities, through skills training, problem-solving exercises, and innovation-focused initiatives, they strengthen their ability to adapt to environmental challenges, generate novel solutions, and sustain operations during disruptions. This finding aligns closely with Promise-Elechi and Onuoha (2023), who found that talent development in hotels significantly improves firm robustness and agility, two critical dimensions of resilience. Their study showed that training programs, knowledge sharing, and sufficient resource allocation empower employees to operate more effectively and respond flexibly to change. Essentially, creativity development is a specific form of talent development, and the positive link in both studies points to the same underlying principle: investing in human capacity directly enhances an organization's adaptive and resilient capabilities.

Integrated Management Process and Organizational Resilience

The Spearman's rho correlation analysis revealed a moderate positive and significant relationship between Integrated Management Process and Organizational Resilience ($\rho = 0.513$, $p < 0.01$), indicating that maritime firms with a coordinated and unified approach

to planning, operations, and decision-making are better equipped to adapt, recover, and sustain performance during challenging periods. This outcome resonates with the findings of Kazinguvu (2016), who examined strategic innovation in Rwandan SMEs and reported that resilience and competitive advantage are enhanced when organizations integrate their management processes with clear communication of vision and strategic goals, empower operational staff to make timely decisions, encourage tolerance for risks and failures, and reward innovative initiatives. Both studies highlight that integration, whether through management processes or innovation culture, fosters organizational agility, reduces operational silos, and positions firms to respond proactively to uncertainties and emerging opportunities. This suggests that building an integrated, strategically aligned management structure serves as a critical foundation for enhancing corporate resilience in dynamic business environments.

Conclusion and Recommendations

The results of this study underscore that organizational resilience in maritime firms is significantly shaped by adaptive, integrated, and innovation-oriented practices. Business networking emerged as a vital external-facing strategy, enabling firms to access new information, resources, and opportunities that strengthen their adaptive capacity. Flexible resource allocation demonstrated the strongest positive influence, affirming that the ability to reassign resources swiftly in response to disruptions is a cornerstone of operational agility. Creativity development, through deliberate investment in employees' innovative capacities, further reinforces resilience by equipping staff to devise novel solutions under pressure. Finally, an integrated management process ensures that planning, operations, and decision-making are harmonized, reducing silos and enabling a proactive response to emerging challenges.

Taken together, these findings reveal a unifying principle: resilience thrives where organizations combine outward-looking engagement, internal adaptability, human capital development, and strategic integration. In turbulent maritime environments, such a multidimensional approach not only safeguards operational continuity but also positions firms for sustained growth and competitive advantage. By embedding these resilience-building practices into their structures and cultures, maritime firms can better withstand environmental turbulence, recover more effectively from disruptions, and maintain long-term viability. Arising from the findings and conclusion of the study, the following recommendations are made:

- i. Maritime firms should invest in expanding and strengthening their business networks through industry associations, trade fairs, joint ventures, and collaborative research initiatives. Building robust external linkages will provide access to up-to-date market intelligence, technological advancements, and strategic opportunities.
- ii. Maritime firms should establish resource flexibility frameworks that allow rapid reallocation of human, financial, and material resources to priority areas during crises, including cross-training employees for multiple functions, creating contingency budgets, and maintaining reserve stocks of critical supplies.
- iii. Organizations should implement structured creativity enhancement programs, including innovation workshops, problem-solving simulations, and cross-functional brainstorming sessions to strengthen employees' ability to generate adaptive solutions.
- iv. Management should also foster a safe-to-innovate culture, where employees are encouraged and rewarded for experimenting with novel approaches to operational challenges without fear of punitive consequences.
- v. Maritime firms should develop comprehensive management integration systems that unify planning, operations, and decision-making under a shared strategic vision. Clear communication channels must be established to align departmental objectives with corporate goals, ensuring seamless coordination.

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