

Entrepreneurial Competence and Business Survival of Water Bottling Firms in Rivers State, Nigeria

Ahanonu, Paience Ijeoma and B. Chima Onuoha²

1. Doctoral Student, Department of Management, University of Port Harcourt.
2. Professor of Management, Department of Management, University of Port Harcourt

ABSTRACT: *This study examined the relationship between entrepreneurial competence and business survival of water bottling firms in Rivers State, Nigeria. Entrepreneurial competence was operationalized using two dimensions: opportunity recognition and strategic decision-making, while business survival was measured through operational efficiency and customer retention. The study adopted a cross sectional research design. The accessible populations comprise of 82 Water bottling firms within Rivers State. The study was a census study. Data were collected from respondents across selected water bottling firms in the state using a structured questionnaire. Spearman's Rank Order Correlation was employed for data analysis. The findings revealed significant and positive relationships between the dimensions of entrepreneurial competence and the indicators of business survival. Specifically, opportunity recognition was strongly associated with both operational efficiency and customer retention. Similarly, strategic decision-making showed a significant positive correlation with operational efficiency and customer retention. Based on these results, the study concludes that enhancing entrepreneurial competence among managers and business owners can significantly improve the survival prospects of water bottling firms in Rivers State. It recommends that firms should foster a proactive entrepreneurial culture and strengthen strategic decision-making capabilities to sustain efficiency and customer loyalty.*

Keywords: Entrepreneurial competence, Opportunity recognition, Strategic decision-making, Business survival

Introduction

Business survival is essential for the continuity and stability of water bottling firms, particularly in developing countries like Nigeria, where inflation, regulatory complexity, and inadequate infrastructure challenge small and medium-sized enterprises. In this industry, survival transcends mere profitability, it requires maintaining water safety standards, regulatory compliance, market access, and supply chain consistency. Ibrahim and Garba (2024) emphasize that survival strategies such as innovation, cost optimization, and effective risk mitigation are key to building resilience. Leading firms like CWAY and Nestlé Pure Life illustrate this by consistently delivering safe drinking water through robust distribution systems and regulatory adherence, which enhances consumer confidence and brand strength.

The high operational costs associated with filtration, bottling, logistics, and certification in water production make survival even more crucial. Firms that cannot sustain these capital-intensive processes often exit the market, particularly local brands that lack access to affordable financing (Ekanem & Edet, 2023). In contrast, companies that remain operational are better equipped to scale operations, maintain supplier relationships, and leverage economies of scale. Surviving firms also retain their workforce and foster long-term brand loyalty. In an industry where quality assurance and packaging innovation are key differentiators, longevity enables firms to invest consistently in technologies that align with evolving hygiene standards and customer expectations.

Moreover, the water bottling industry is highly susceptible to disruptions stemming from health crises, environmental shifts, and regulatory reforms. The COVID-19 pandemic exposed these vulnerabilities, yet firms that had previously adopted digital platforms and decentralized distribution networks continued serving consumers with minimal interruption (Obloh & Obiora, 2023). This adaptability, born out of well-structured survival strategies, helped certain firms retain market presence and build competitive advantage while others faltered. Yusuf and Dauda (2022) affirm that survival is not merely about sustaining business operations—it provides a foundation for strategic foresight, organizational learning, and long-term market relevance in turbulent economic environments.

In addition to firm-level benefits, the survival of water bottling businesses contributes to broader socio-economic outcomes. These include stable job creation, support for local supply chains, and greater access to potable water, particularly in underserved communities. For example, long-standing firms indirectly benefit producers of packaging materials, transporters, and marketers, thereby generating ripple effects across the economy. As Chukwu and Uchenna (2021) point out, firms that integrate sustainability into their survival strategies also tend to invest in community initiatives, such as water access programs and environmental clean-ups, which enhance their public image and long-term acceptability in host communities.

Entrepreneurial competence, meanwhile, serves as the engine driving survival in this competitive industry. It encompasses a range of cognitive and behavioral attributes that enable entrepreneurs to innovate, solve problems, and navigate shifting market dynamics. As highlighted by Obloh and Obiora (2023), competence equips entrepreneurs to adapt to environmental uncertainties, meet consumer expectations, and execute value-creating strategies. In Nigeria's bottled water sector, where regulatory compliance and product

differentiation are critical, entrepreneurs who exhibit competence are more likely to maintain operational efficiency, reduce waste, and identify untapped market opportunities—all of which enhance their firm's sustainability.

The growth of Nigeria's water bottling industry, driven by urbanization and rising demand for hygienic water, has created space for innovation and competition. However, many firms fail to endure due to poor strategic execution and limited managerial capacity. Companies like Everpure Nigeria Limited and Rite Foods Limited have demonstrated how entrepreneurial foresight and investment in efficiency and packaging innovation can ensure continued relevance in a saturated market. Yusuf and Dauda (2022) noted that such proactive decision-making helps entrepreneurs navigate fluctuations in input costs, respond to consumer shifts, and adjust to regulatory updates—practices essential for survival.

Research continues to show that firms led by competent entrepreneurs tend to display higher rates of adaptability, innovation, and customer loyalty. Chukwu and Uchenna (2021) found that leadership competence among South-East Nigerian water bottlers translated into higher survival and retention rates. Competent entrepreneurs are quick to identify new trends—like the growing preference for recyclable materials—and shift operational strategies accordingly. Ekanem and Edet (2023) support this view, emphasizing that competencies such as regulatory awareness and quality control not only reduce legal risks but also create a framework for long-term business continuity in an increasingly scrutinized industry.

Despite several studies on entrepreneurial competence (Chukwu and Uchenna, 2021; Ekanem & Ede, 2023; Yusuf & Dauda, 2022) and firm survival (Ekanem & Edet, 2023; Ibrahim & Garba, 2024; Oboh & Obiora, 2023;), a dearth of empirical research in the influence of entrepreneurial competence and business survival of water bottling firms motivate this study. It is therefore essential to understand how entrepreneurial competence directly shapes the survival outcomes of water bottling firms in Rivers state, Nigeria. As new firms continue to emerge, their success will hinge on the capacity of their leaders to innovate, manage resources effectively, and comply with evolving health and safety standards. The findings of this study aim to inform practical interventions such as entrepreneurship development programs, policy guidelines, and business advisory services tailored specifically for this sub-sector. As Ibrahim and Garba (2024) underscore, improving entrepreneurial competence is central to ensuring that Nigeria's water bottling sector contributes meaningfully to both economic development and public health.

Statement of the Problem.

The challenge of poor business survival remains a critical concern for water bottling firms in Rivers State, Nigeria. Despite the growing demand for safe and portable drinking water, many indigenous water bottling firms are struggling to maintain long-term operations. Frequent business closures, reduced product quality, inability to scale, and employee layoffs have become common across the industry, indicating a low level of sustainability. Studies show that business longevity among these firms is significantly hindered by poor entrepreneurial direction, lack of innovation, and weak resource management (Ekanem & Edet, 2023; Yusuf & Dauda, 2022). The inability of firm owners to apply key entrepreneurial competencies, such as strategic foresight, risk management, and customer responsiveness, further exacerbates the survival crisis facing water bottling enterprises in the region.

When business survival is threatened, multiple negative consequences follow. First, there is a loss of employment for both skilled and unskilled workers who depend on these firms for livelihood. Secondly, the collapse of water bottling firms restricts access to affordable, hygienic drinking water in urban and rural areas, contributing to public health challenges. Business shutdowns also lead to a breakdown in supplier-distributor relationships and loss of investor confidence in the sector. According to Ibrahim and Garba (2024), poor survival of small and medium-scale enterprises undermines not only firm-level productivity but also regional economic development and household income stability. Therefore, persistent low survival rates in the water bottling sector can destabilize local economies and amplify socioeconomic vulnerabilities in Rivers State.

Additionally, poor survival undermines competitive advantage and limits the firm's capacity to innovate and grow. In the context of the Nigerian water bottling industry, competition is intensifying, and firms that fail to sustain operations are quickly replaced by more agile or better-funded competitors. Without adequate survival mechanisms, firms are unable to invest in quality control, improve production efficiency, or expand their market base. Oboh and Obiora (2023) observed that many water bottling entrepreneurs in Nigeria operate with minimal long-term strategy and are ill-prepared for market shocks such as price volatility, regulatory changes, or shifts in consumer preferences. These weaknesses ultimately create a cycle of stagnation and collapse, limiting the sector's potential to contribute meaningfully to health, employment, and industrial development.

While several interventions have been introduced to address poor business survival—such as government-backed entrepreneurship schemes, access-to-credit programs, and regulatory reforms—the problem persists. Many of these programs focus on financial support without building the entrepreneurial capacity required to drive sustainable business practices. The lack of tailored training and development for water bottling entrepreneurs has left critical competency gaps in the areas of opportunity recognition, decision-making, and operational efficiency (Chukwu & Uchenna, 2021). This disconnect between intervention and impact indicates the need for a more strategic approach to business development in the sector.

This study, therefore, seeks to investigate how entrepreneurial competence can enhance the business survival of water bottling firms in Rivers State. By examining specific competencies such as opportunity recognition, strategic decision-making, and innovation,

this research aims to bridge the gap between entrepreneurial behaviour and firm sustainability. It will provide empirical evidence on how skilful entrepreneurship can strengthen operational resilience, drive customer retention, and promote long-term survival among firms in the water bottling industry. As affirmed by Ekanem and Edet (2023), building entrepreneurial competence is essential for transforming small-scale manufacturing enterprises into sustainable ventures capable of withstanding economic, regulatory, and competitive pressures.

Aim and Objectives of the Study

The aim of this study is to examine the relationship between entrepreneurial competence and business survival of water bottling firms in Rivers State, Nigeria. The specific objectives are to;

- i. Examine the relationship between opportunity recognition and operational efficiency of the water bottling firms in Rivers State
- ii. Determine the relationship between opportunity recognition and customer retention of the water bottling firms in Rivers State
- iii. Investigate the relationship between strategic decision-making and operational efficiency of the water bottling firms in Rivers State
- iv. Ascertain the relationship between strategic decision-making and customer retention of the water bottling firms in Rivers State

Research Questions

The following research questions were given in the study;

- i. What is the relationship between opportunity recognition and operational efficiency of the water bottling firms in Rivers State?
- ii. How does opportunity recognition relate to customer retention of the water bottling firms in Rivers State?
- iii. How does strategic decision-making relate to operational efficiency of the water bottling firms in Rivers State?
- iv. What is the nature of the relationship between strategic decision-making and customer retention of the water bottling firms in Rivers State?

Research Hypotheses

The following research hypotheses were stated and tested in this study;

- Ho₁: There is no significant relationship between opportunity recognition and operational efficiency of the water bottling firms in Rivers State
- Ho₂: There is no significant relationship between opportunity recognition and customer retention of the water bottling firms in Rivers State
- Ho₃: There is no significant relationship between strategic decision-making and operational efficiency of the water bottling firms in Rivers State
- Ho₄: There is no significant relationship between strategic decision-making and customer retention of the water bottling firms in Rivers State.

Conceptual Framework

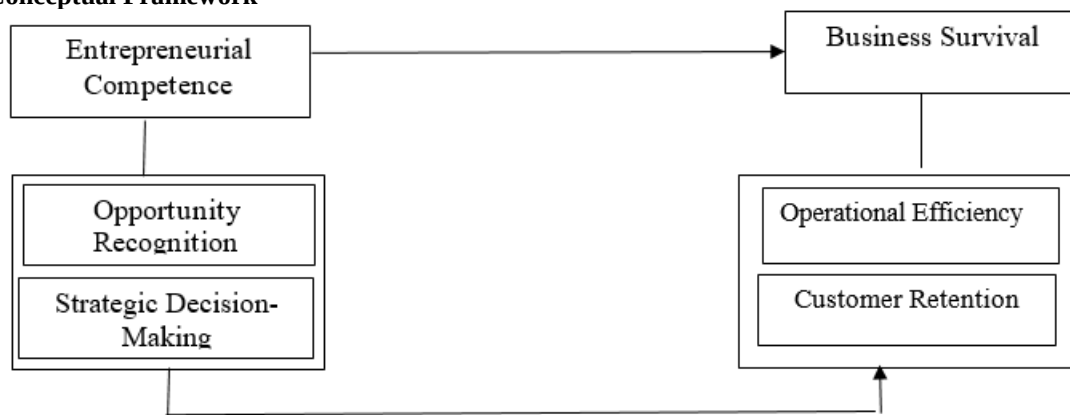


Figure 1: A Conceptual Model Showing the Relationship Between Entrepreneurial Competence and Business Survival of Water Bottling Firms in Rivers State (Adapted from Neneh, 2023; Ibrahim & Musa, 2023)

Note:

- **Entrepreneurial Competence** is represented by *Opportunity Recognition* and *Strategic Decision-Making* (Neneh, 2023).

- **Business Survival** is measured by *Operational Efficiency* and *Customer Retention* (Ibrahim & Musa, 2023).

Entrepreneurial Competence

Entrepreneurial competence refers to the knowledge, skills, attitudes, and behaviors that enable entrepreneurs to effectively recognize opportunities, make informed decisions, and manage resources for business success. In the Nigerian water bottling industry, entrepreneurial competence has been a key differentiator between firms that thrive and those that fail. For example, CWAY Group's entry into Nigeria was marked by the founder's strong competence in market analysis and opportunity recognition, identifying a growing demand for safe, dispenser-packaged water among urban households and workplaces. This foresight allowed CWAY to establish a dominant presence in cities like Lagos and Abuja (Nwachukwu et al., 2017). Similarly, smaller players like Aquapac Limited have succeeded by leveraging innovation and strategic planning to serve niche markets with sachet and table water, maintaining regulatory compliance and brand loyalty. Entrepreneurs with high levels of competence are more adaptable, proactive, and capable of navigating regulatory challenges and consumer expectations—qualities that are essential for sustaining bottled water businesses in competitive and resource-constrained markets.

Opportunity Recognition

Opportunity recognition is the entrepreneur's ability to identify unmet needs or gaps in the market and convert them into viable business ideas. In Nigeria's water bottling industry, firms that excel in opportunity recognition have leveraged urbanization, poor access to potable water, and increasing health consciousness to expand their reach. For example, CWAY Group entered the Nigerian market in the early 2000s and identified the need for safe drinking water among the growing middle class and corporate organizations, leading to the successful launch of its dispenser water products (Nwachukwu et al., 2017). Similarly, Aquapac Limited in Lagos identified the rising demand for portable sachet water in underserved communities and tailored its product offerings accordingly. Research confirms that opportunity recognition is a crucial determinant of entrepreneurial performance, especially in dynamic environments where timely identification of trends can offer a competitive edge (Akinbami et al., 2022). Entrepreneurs in the water bottling business who monitor market shifts and consumer behaviors are better positioned to introduce innovative packaging, delivery systems, and new water variants that meet evolving needs. Firms like CWAY Water have succeeded due to their founders' ability to strategically recognize and act on emerging market demands, such as the growing preference for sachet water in urban and peri-urban areas (Olawale & Garwe, 2010).

Strategic Decision-Making

Strategic decision-making refers to the entrepreneur's ability to make long-term, goal-oriented decisions that align with organizational vision and market realities. In Nigeria's competitive water bottling sector, firms like Eva Water (a Coca-Cola product) and Aquadana have stayed ahead through strategic decisions regarding distribution partnerships, pricing, and branding. These firms invest heavily in market research to determine consumer preferences and logistics efficiency, enabling them to make informed choices that sustain profitability and market share (Ibidunni et al., 2020). For example, Eva Water strategically expanded its distribution channels to include e-commerce platforms, capitalizing on the shift in consumer purchasing behavior post-COVID-19. According to Ogueyungbo et al. (2021), strategic decision-making contributes significantly to business growth and resilience, especially in volatile industries like food and beverages. Entrepreneurs who make data-driven and future-oriented decisions improve adaptability, enhance stakeholder confidence, and sustain long-term success in competitive markets like water bottling.

Business Survival

Business survival refers to the ability of a firm to sustain its operations over time despite economic, environmental, and industry-specific challenges. In the water bottling industry, business survival depends on maintaining product quality, controlling operational costs, and responding to market dynamics. In Nigeria, many water bottling firms struggle with high production costs due to unreliable electricity supply and inflation in raw material prices. However, companies like CWAY Nigeria and Nestlé Waters have demonstrated strong business resilience through strategic operational planning and consistent customer engagement (Abiola et al., 2021). CWAY, for example, invested in localized production facilities and optimized its logistics to reduce downtime and increase responsiveness in delivery, thereby maintaining market relevance even during periods of economic downturn. Agwu & Emeti, (2014) study show that operational efficiency and financial discipline play vital roles in the sustainability of manufacturing firms, including water bottlers. Moreover, building strong relationships with distributors and retailers, as practiced by Aquadana and Eva Water, enhances the supply chain and ensures consistent product availability, which is a critical factor in customer loyalty and long-term survival (Ibidunni et al., 2020). In essence, firms that strategically manage internal processes and market relationships are more likely to endure competitive and macroeconomic pressures.

Operational Efficiency

Operational efficiency involves minimizing waste and optimizing resources to deliver products or services at the lowest cost while maintaining high quality. In water bottling, efficiency in sourcing raw materials (like PET bottles), maintaining machinery, and managing logistics is vital. For example, Nestlé Waters Nigeria employs automated bottling systems and energy-efficient

technologies to enhance productivity and reduce operational costs (Abiola et al., 2021). Their strategic investment in renewable energy and supply chain optimization has positioned them as a model of sustainable efficiency. Research by Agwu and Emeti (2014) also confirms that SMEs in Nigeria that focus on improving operational processes tend to have better survival rates and customer satisfaction. Efficient operations not only reduce overhead costs but also ensure consistency in product quality and delivery time—factors crucial for maintaining consumer trust in the bottled water industry. Operational efficiency allows firms to reduce production costs and improve quality, which is crucial in a sector heavily reliant on logistics, hygiene standards, and packaging. For example, Nestlé Waters in Nigeria leverages automation and streamlined logistics to maintain low costs while meeting quality expectations, a strategy that has contributed to its sustained market presence (Nwachukwu et al., 2017).

Customer Retention

Customer retention is the ability of a business to maintain long-term relationships with its clients, leading to repeat purchases and brand loyalty. In the bottled water industry, where products are often seen as interchangeable, maintaining a loyal customer base can be a strong competitive advantage. Brands like CWAY and Eva Water in Nigeria have achieved high retention by consistently delivering clean, taste-tested, and well-packaged products while also leveraging loyalty programs and widespread availability (Okafor et al., 2020). According to research, businesses that prioritize customer experience and satisfaction tend to retain more customers, even in saturated markets (Onuoha & Unegbu, 2018). For instance, CWAY offers water delivery services directly to homes and offices in major cities, making it easy for customers to stick with the brand. Effective retention strategies help reduce marketing costs and increase the lifetime value of customers, making them critical to long-term survival and profitability. Eva Water (a brand of Coca-Cola Nigeria) have retained market share by offering consistent product quality and broad distribution, reinforcing the link between customer loyalty and business continuity. Scholars have also affirmed that businesses with high customer retention rates and operational excellence are more likely to survive economic downturns and industry disruptions (Ibidunni et al., 2020).

Resource-Based View (RBV)

The Resource-Based View (RBV) of the firm, proposed by Barney (1991), emphasizes that the sustainable success of an organization depends on its ability to acquire and effectively utilize valuable, rare, inimitable, and non-substitutable (VRIN) resources. This theory is highly relevant to the relationship between entrepreneurial competence and business survival in the water bottling industry. Entrepreneurial competence—such as opportunity recognition, innovation, and strategic decision-making—can be considered intangible resources that are central to gaining and sustaining competitive advantage. In the context of water bottling firms in Nigeria, entrepreneurs who possess these competencies are better equipped to manage operational challenges, respond to market shifts, and exploit emerging opportunities, such as the growing demand for eco-friendly bottled water and the use of digital distribution channels. These competencies enable firms like CWAY and Aquapac to maintain operational efficiency and retain customers, ultimately enhancing survival in a competitive market. The RBV thus provides a strong theoretical lens for understanding how internal capabilities—particularly entrepreneurial skills and decision-making—serve as key drivers of firm survival and long-term performance in the bottled water sector.

Empirical Review

Akinbami, Afolabi, and Ojo (2022) conducted a study to examine the effect of entrepreneurial opportunity recognition on the performance and survival of small and medium enterprises (SMEs) in Nigeria. The study focused on SMEs operating in Lagos State, with a population of 500 registered businesses. Using a sample size of 217 SMEs selected through stratified sampling, the study employed structured questionnaires to gather data. Findings revealed that entrepreneurial competence, particularly the ability to recognize and act on business opportunities, had a significant positive impact on firm survival and growth. The authors concluded that opportunity recognition is a critical entrepreneurial skill that helps SMEs stay competitive and respond swiftly to market changes.

In a study on entrepreneurial competencies and business performance in Sub-Saharan Africa, Adegbite, Ilori, and Aderemi (2021) explored how entrepreneurial skills affect the survival of SMEs in Nigeria. The study covered a population of 1,200 SMEs in the manufacturing sector across three southwestern states. A sample of 300 entrepreneurs was drawn using a multistage sampling method. Data collected through questionnaires were analysed using regression techniques. The results indicated that entrepreneurial competencies such as decision-making, innovation, and leadership had a strong positive correlation with both short-term performance and long-term survival of firms. The study emphasized the need for capacity-building programs to enhance these competencies among Nigerian entrepreneurs.

Ibidunni, Ogunnaike, and Abiodun (2020) conducted a study to assess the relationship between business strategy, entrepreneurial orientation, and SME survival in Nigeria. Focusing on SMEs in Ogun and Lagos states, the researchers studied a population of over 800 registered businesses. A sample of 250 SMEs was drawn through purposive sampling. The study found that entrepreneurial competence—particularly in areas such as market orientation, strategic planning, and innovation—was a significant predictor of long-term business survival. Firms that demonstrated strategic decision-making skills were more adaptable and better able to manage external shocks, including those caused by economic instability and competition.

Eze, Okoye, and Ugwu (2019) investigated the influence of entrepreneurial competence on the sustainability of micro and small enterprises (MSEs) in Enugu State, Nigeria. The study population consisted of 1,000 registered MSEs, from which 300 were randomly selected. Using survey methods, the researchers analysed data through descriptive and inferential statistics. The findings showed that key competencies such as risk-taking, innovation, and effective communication significantly influenced the survival and sustainability of MSEs. The authors concluded that continuous development of entrepreneurial skills is essential for withstanding the dynamic challenges of the business environment.

Methodology

The cross-sectional survey was used in this study. This was used because the variables under study are not under the control of the researcher and the research intends to generate new fact without intentional manipulation of the variables. The accessible populations comprise of 82 Water bottling firms *within* Rivers State. The study was a census study. The primary data was obtained through the use of a well-structured questionnaire. The independent variable, entrepreneurial competence, was operationalized using two dimensions: opportunity recognition and strategic decision-making. Each of these constructs was measured using a set of five items. Five items were used in measuring opportunity recognition (e.g., "I am quick to identify emerging business opportunities in my industry."). Likewise, five items were used in measuring strategic decision-making (e.g., "I make strategic decisions based on careful analysis of internal and external business environments."). On the other hand, the criterion variable, firms' performance, was measured using operational efficiency and customer retention. Five items were used to measure operational efficiency (e.g., "Our firm consistently minimizes waste while maximizing output."). Five items were also used to measure customer retention (e.g., "We have a high rate of repeat customers who are loyal to our brand."). Face and content validity were used to determine the validity of the instrument used in this investigation. The reliability was determined using Cronbach's Alpha. The Cronbach's Alpha reliability level of 0.7 was used in the investigation. Values above 7.0 are considered composite reliable. Spearman's rank correlation analyses were used for the analysis.

Results and Discussion

82 questionnaires were distributed, but only customer retention (96.3%) copies were returned and constitute the valid questionnaire. The hypotheses test is undertaken at a 95% confidence interval and the decision rule is stated below.

Where $P < 0.05$ = Reject the null hypotheses

Where $P > 0.05$ = Accept the null hypotheses

Table 1: Correlations between Opportunity recognition and dimensions of Survival

			Opportunity recognition	Operational efficiency	Customer retention
Spearman's rho	Opportunity recognition	Correlation Coefficient	1.000	.805**	.810**
		Sig. (2-tailed)	.	.000	.000
		N	79	79	79
	Operational efficiency	Correlation Coefficient	.805*	1.000	.795**
		Sig. (2-tailed)	.000	.	.000
		N	79	79	79
	Customer retention	Correlation Coefficient	.810**	.795**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	79	79	79

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

Source: SPSS Output, 2025.

Opportunity Recognition and Operational Efficiency: As shown in Column Five of Table 1, the Spearman's rho value is 0.805 ($p = 0.000$), which is less than the significance threshold of 0.05. The coefficient of determination (r^2) is 0.648, indicating that approximately 64.8% of the variation in operational efficiency can be explained by opportunity recognition. Based on these results, the null hypothesis (H_{01}) is rejected, and the alternative hypothesis (H_{a1}) is accepted. This indicates a significant and positive relationship between opportunity recognition and operational efficiency.

Opportunity Recognition and Customer Retention: Column Six of Table 1 reveals a Spearman's rho value of 0.810 ($p = 0.000$), which is also below the alpha level of 0.05. The r^2 value of 0.656 suggests that 65.6% of the variance in customer retention is attributable to opportunity recognition. Consequently, the null hypothesis (H_{02}) is rejected in favour of the alternative hypothesis. This confirms a strong and positive relationship between opportunity recognition and customer retention.

Table 2: Correlations between Strategic decision-making and the dimension of Survival

			Strategic decision-making	Operational efficiency	Customer retention
Spearman's rho	Strategic decision-making	Correlation Coefficient	1.000	.755**	.725**
		Sig. (2-tailed)	.	.000	.000
		N	79	79	79
	Operational efficiency	Correlation Coefficient	.755**	1.000	.740**
		Sig. (2-tailed)	.000	.	.000
		N	79	79	79
	Customer retention	Correlation Coefficient	.725**	.740**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	79	79	79

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

Source: SPSS Output, 2025.

Strategic Decision-Making and Operational Efficiency: According to Column Five of Table 2, the Spearman's rho value is 0.755 ($p = 0.000$), which is below the significance level of 0.05. The coefficient of determination (r^2) is 0.570, indicating that 57.0% of the variation in operational efficiency is explained by strategic decision-making. Given this result, the null hypothesis (H_{03}) is rejected, and the alternative hypothesis (H_{a3}) is accepted. This demonstrates a **strong and** significant positive relationship between strategic decision-making and operational efficiency.

Strategic Decision-Making and Customer Retention: As shown in Column Six of Table 2, the Spearman's rho value is 0.725 ($p = 0.000$), which is less than the 0.05 significance level. The r^2 value is 0.526, indicating that strategic decision-making accounts for 52.6% of the variation in customer retention. Based on this evidence, the null hypothesis (H_{04}) is rejected in favour of the alternative hypothesis. This suggests that there is a highly significant and positive relationship between strategic decision-making and customer retention.

Discussion of Findings

The present study examined the influence of entrepreneurial competence, specifically opportunity recognition and strategic decision-making, on the survival of water bottling firms in Rivers State, using operational efficiency and customer retention as indicators of business survival. The findings provide strong empirical evidence supporting the hypothesized relationships.

Opportunity Recognition and Operational Efficiency

The results from Table 1 reveal a strong and significant positive relationship between opportunity recognition and operational efficiency ($p = 0.805$, $p < 0.01$), with a coefficient of determination (r^2) of 0.648. This implies that the ability of firms to recognize and exploit opportunities contributes significantly to the efficiency of their operations. This finding aligns with the study by Neneh (2023), who emphasized that entrepreneurs who identify opportunities early are better positioned to implement efficient operational strategies, minimize waste, and enhance productivity. Similarly, Adegbite and Ogunyomi (2022) asserted that opportunity-driven firms often exhibit greater adaptability, which contributes to operational success.

Opportunity Recognition and Customer Retention

The correlation analysis further shows a strong positive relationship between opportunity recognition and customer retention ($p = 0.810$, $p < 0.01$), with an r^2 value of 0.656. This suggests that firms that are alert to market opportunities tend to develop innovative solutions that address customer needs, thus increasing loyalty and retention. This result conforms with the findings of Okoye and Edeh (2022), who reported that opportunity recognition plays a key role in creating value propositions that resonate with customers. In the same vein, Chukwuma and Bature (2023) found that proactive firms that anticipate customer expectations through opportunity recognition enjoy higher levels of customer satisfaction and loyalty.

Strategic Decision-Making and Operational Efficiency

As shown in Table 2, a significant positive relationship was also observed between strategic decision-making and operational efficiency ($p = 0.755$, $p < 0.01$), with an r^2 of 0.570. This indicates that firms that make informed and deliberate strategic decisions are more likely to improve their internal operations. This finding agrees with the research of Ibrahim and Musa (2023), who established that strategic decision-making enhances goal alignment and resource optimization, leading to improved operational output. Additionally, Ekanem and Omisore (2022) confirmed that operational efficiency improves significantly when decisions are made using analytical and long-term strategic frameworks.

Strategic Decision-Making and Customer Retention

The study further found a strong and significant positive relationship between strategic decision-making and customer retention ($p = 0.725$, $p < 0.01$), with 52.6% of the variation explained ($r^2 = 0.526$). This suggests that when firms base their decisions on strategy and foresight, they are better positioned to retain customers over time. This outcome supports the findings of Nwachukwu and Ugochukwu (2022), who argued that strategic decision-making improves customer relationship management, product relevance, and brand consistency. Similarly, Aliyu and Yusuf (2023) reported that strategic decision-making contributes to sustained customer satisfaction by aligning offerings with long-term customer needs.

In summary, the results of this study show that entrepreneurial competence, measured through opportunity recognition and strategic decision-making, has a strong and significant influence on operational efficiency and customer retention. These findings are consistent with the views of contemporary scholars such as Neneh (2023), Okoye and Edeh (2022), Ibrahim and Musa (2023), and Nwachukwu and Ugochukwu (2022), who emphasized the critical role of entrepreneurial behavior in enhancing firm survival and competitiveness. Therefore, it is recommended that water bottling firms in Rivers State invest in strengthening entrepreneurial skills among managers to improve their operational and customer retention capabilities.

Conclusion

This study set out to examine the influence of entrepreneurial competence, specifically opportunity recognition and strategic decision-making, on the business survival of water bottling firms in Rivers State, using operational efficiency and customer retention as key indicators. The findings revealed that both dimensions of entrepreneurial competence have a strong and significant positive relationship with the components of firm survival. Specifically, opportunity recognition was found to significantly enhance operational efficiency and customer retention, indicating that firms that can identify and act on emerging opportunities are more likely to optimize operations and retain customers. Similarly, strategic decision-making showed a strong positive association with both survival metrics, suggesting that firms that make well-informed and deliberate strategic choices are better positioned to achieve sustainable performance.

These outcomes reinforce the importance of entrepreneurial competence as a critical success factor in today's competitive and dynamic business environment. The study, therefore, concludes that improving entrepreneurial capabilities, through enhanced opportunity recognition and strategic decision-making, can significantly improve the chances of survival and long-term sustainability of water bottling firms in Rivers State. Consequently, water bottling firms are encouraged to invest in entrepreneurial development, training, and strategic planning initiatives to enhance their ability to navigate market challenges, optimize operations, and retain a loyal customer base.

Recommendations

- i. Water bottling firms should invest in entrepreneurial training programs that enhance employees' ability to recognize emerging market trends, customer needs, and competitive gaps. Management should also encourage a culture of proactive scanning of the environment, innovation, and quick response to opportunities, as this will significantly improve operational efficiency and resource utilization.
- ii. Firms should leverage opportunity recognition to develop customer-centric products and services. Regular market research and feedback collection should be institutionalized to ensure that customer preferences are promptly identified and addressed. By staying ahead of customer expectations, firms can build stronger relationships and increase customer loyalty and retention.
- iii. Management should adopt a data-driven and participatory approach to strategic decision-making, involving key internal stakeholders to ensure alignment and effectiveness. Strategic planning tools such as SWOT analysis, scenario planning, and performance forecasting should be used regularly to inform operational choices and improve efficiency across the value chain.
- iv. To improve customer retention, firms should incorporate customer insights and market intelligence into strategic decisions. Strategies aimed at product consistency, service quality, pricing, and brand engagement should be periodically reviewed and updated based on consumer trends and feedback. Long-term strategic decisions must prioritize customer experience as a core business objective.

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