

BETWEEN RISK MANAGEMENT STRATEGIES AND BUSINESS SUCCESS OF BOTTLED WATER COMPANIES IN RIVERS STATE, NIGERIA

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Abstract

This study investigated the relationship between risk management strategies and business success of bottled water companies in Rivers State, Nigeria. Specifically, it examines how risk identification and risk assessment relate to key indicators of business success such as profitability and market share. The cross sectional survey research design was adopted for the study. The population of this study consisted of Fifteen (15) bottled waters companies registered with the companies and allied matter and licenced by (NAFDAC) National Agency for Food and Drug Administration which has been in operation for over 10 years and above. Using a census approach, a total of 60 managers were selected as key respondents for the study. The instrument for the study was the questionnaire. The Cronbach alpha was adopted in assessing the reliability of the study instrument with coefficient of 0.7. The Spearman Rank Order Correlation was adopted to test the hypotheses at 0.05 degree of significance. The findings reveal a significant positive relationships between dimensions of risk management strategies and measures of business success. The study concludes that effective risk management practices through risk identification and risk assessment are vital for achieving and sustainable business success in terms of profitability and market shares of bottled water industry. It recommends among others that bottled water companies in Rivers State should institutionalize structured risk identification processes across all levels of operation

Keywords: Risk Management Strategies, Business Success, Risk Identification and Risk Assessment, Profitability And Market Share

Introduction

In contemporary business environments characterized by volatility, uncertainty, complexity, and ambiguity, the implementation of effective risk management strategies is paramount for organizational sustainability and competitive advantage (Hopkin, 2018). Risk management, as a strategic organizational process, involves the systematic identification, assessment, and monitoring of risks that could potentially impact the achievement of business objectives (Fraser & Simkins, 2016). This multidimensional process is particularly critical for manufacturing entities such as bottled water companies in Rivers State, Nigeria, where firms operate within a complex



socio-economic and regulatory landscape that exposes them to diverse operational, financial, and market risks.

Risk identification constitutes the foundational stage of risk management, entailing the comprehensive recognition and documentation of potential risk factors inherent in business operations (Hillson & Murray-Webster, 2007). For bottled water companies, risks identified may include contamination of water sources, supply chain disruptions, infrastructural deficiencies, regulatory non-compliance, and fluctuating consumer demand (Okafor & Eze, 2021). Effective risk identification facilitates the early detection of threats, enabling organizations to proactively devise mitigation strategies. Following identification, risk assessment involves the qualitative and quantitative evaluation of identified risks to determine their potential impact and likelihood (Aven, 2016). This evaluative process prioritizes risks based on severity, enabling firms to allocate resources efficiently toward the management of critical vulnerabilities. In the context of bottled water producers in Rivers State, rigorous risk assessment is necessary to appraise health and safety risks associated with water quality, as well as market risks tied to competition and consumer preferences (Udeh & Ezeh, 2022).

Business success, as an outcome variable, has been extensively conceptualized within the literature through multiple performance dimensions, including profitability, market share, and customer satisfaction (Richard, Devinney, Yip, & Johnson, 2009). Profitability remains a primary indicator, reflecting the firm's ability to generate earnings relative to expenses, thus ensuring financial viability and investor confidence (Brigham & Ehrhardt, 2016). For bottled water companies, profitability is influenced by cost controls, pricing strategies, and operational efficiencies directly linked to effective risk management. Market share represents another critical measure of business success, signifying the firm's competitive position and customer base within the industry (Kotler & Keller, 2016). Companies that systematically manage risks tend to maintain consistent supply, quality, and compliance standards, thereby strengthening brand reputation and expanding market penetration (Nwogwugwu, 2015). In Rivers State, where market competition among bottled water producers is intense, strategic risk mitigation can serve as a differentiator enhancing market share. Customer satisfaction, encompassing consumer perceptions of product quality, service reliability, and corporate responsibility, is essential for fostering loyalty and sustaining revenue streams (Oliver, 2014). Risk management practices that ensure water quality compliance and timely delivery directly contribute to heightened customer satisfaction (Okoro & Onwuliri, 2019). Satisfied customers are more likely to engage in repeat purchases and positive word-of-mouth, further consolidating firm success.

The intersection of risk management and business success has been supported by empirical evidence indicating that firms with robust risk management frameworks demonstrate superior financial performance and market competitiveness (Nnaji, Eze, & Okoye, 2017). Despite the growing recognition of risk management's strategic importance, there remains a paucity of localized studies examining its dimensions—identification, assessment, and monitoring—and their effects on the performance of bottled water companies within the specific socio-economic context of Rivers State. Therefore, this study seeks to bridge this gap by investigating the influence



of risk management strategies, operationalized through the dimensions of risk identification, risk assessment, and risk monitoring, on business success indicators such as profitability, market share, and customer satisfaction of bottled water companies in Rivers State. The findings are expected to offer empirical insights that can inform managerial practices and policy formulation aimed at enhancing the resilience and growth of the bottled water industry in the region.

Statement of the Problem

Despite the critical role of risk management in enhancing business performance, bottled water companies in Rivers State continue to grapple with multifaceted risks that threaten their sustainability and growth. These risks arise from environmental uncertainties, infrastructural inadequacies, regulatory complexities, and market dynamics that characterize the business landscape in the region (Ezeani & Nweke, 2019). While risk management frameworks, encompassing risk identification, risk assessment, and risk monitoring—are recognized as strategic tools for mitigating these threats (Hopkin, 2018), there remains a significant gap in understanding how these specific dimensions are operationalized within the bottled water sector in Rivers State and how they influence key performance outcomes.

Empirical evidence suggests that inadequate risk identification often results in the failure to detect emerging threats timely, leading to operational disruptions and compromised product quality (Okafor & Eze, 2021). This is particularly pertinent in the bottled water industry, where contamination risks and supply chain vulnerabilities can have severe consequences for consumer health and corporate reputation (Udeh & Ezeh, 2022). However, it is unclear whether bottled water companies in Rivers State systematically and comprehensively identify risks inherent in their production and distribution processes, thus limiting the effectiveness of their risk mitigation strategies. Furthermore, ineffective risk monitoring hinders continuous evaluation and timely response to evolving risks, reducing firms' adaptive capacity in a dynamic environment (Fraser & Simkins, 2016). In Rivers State, rapid infrastructural changes, fluctuating regulatory demands, and shifting consumer preferences require bottled water companies to maintain vigilant monitoring systems. Yet, preliminary observations indicate that such monitoring is often reactive rather than proactive, compromising the sustainability of business operations (Ezeani & Nweke, 2019).

Consequently, the business success of bottled water companies in Rivers State measured through profitability and market share is at risk due to the potential inadequacies in the implementation of comprehensive risk management strategies. Profitability, as a fundamental indicator of financial health, is vulnerable to disruptions caused by unmanaged risks, which can increase operational costs and reduce revenue (Brigham & Ehrhardt, 2016). Market share may decline if competitors better manage risks, ensuring consistent product availability and quality (Kotler & Keller, 2016). Additionally, customer satisfaction, which hinges on product reliability and service quality, is jeopardized by risk-related failures, potentially eroding consumer trust and loyalty (Oliver, 2014).

Despite the recognized importance of these dimensions, there is a paucity of empirical studies focusing explicitly on the nexus between risk management practices and business success within



the bottled water industry in Rivers State. This gap limits the ability of managers and policymakers to develop tailored interventions that address the unique risk landscape of the region's bottled water market. Therefore, this study seeks to investigate how risk identification, risk assessment, and risk monitoring influence profitability and market share of bottled water companies in Rivers State

Conceptual Framework

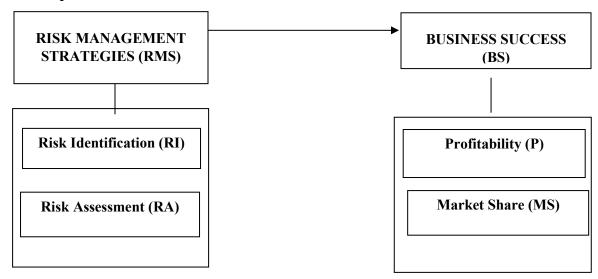


Figure 2.1: The Conceptual Framework of the Relationship between Risk Management Strategies and Business Success

Source: Source: Namumbya (2024); Fraser & Simkins, 2016), Researcher's Conceptualisation (2025)

Objectives of the Study

This study aims to determine the relationship between risk management strategies and business success of bottled water companies in Rivers State. The other objectives are to;

- i. ascertain the relationship between risk identification and profitability of bottled water companies in Rivers State.
- ii. determine the relationship between risk identification and market share of bottled water companies in Rivers State.
- iii. ascertain the relationship between risk assessment and profitability of bottled water companies in Rivers State.
- iv. know the relationship between risk assessment and market share of bottled water companies in Rivers State.



Research Questions

- i. Is there any relationship between risk identification and profitability of bottled water companies in Rivers State?
- ii. What is the relationship between risk identification and market share of bottled water companies in Rivers State?
- iii. What is the relationship between risk assessment and profitability of bottled water companies in Rivers State?
- iv. Is there any relationship between risk assessment and market share of bottled water companies in Rivers State?

Hypotheses

H0₁: There is no significant relationship between risk identification and profitability of bottled water companies in Rivers State.

H0₂: There is no significant relationship between risk identification and market share of bottled water companies in Rivers State.

H₀₃: There is no significant relationship between risk assessment and profitability of bottled water companies in Rivers State.

H0₄: There is no significant relationship between risk assessment and market share of bottled water companies in Rivers State.

Review of Related Literature

The Concept of Risk Management Strategies

Risk refers to a situation that has been evaluated under challenging conditions or involves the potential for deviation from anticipated or desired results (Bessis, 2021). defined risks as being anything that limits the achievement of predetermined goals, this definition is consistent with the Business Dictionary, which defines risk as a possibility or threat of damage, injury, liability, loss or other adverse consequences arising from external or internal vulnerabilities that can be avoided through preventive action (Kanchu & Kumar, 2023). Risk management reflects the culture, procedures, and frameworks aimed at efficient risk management, such as prospective opportunities and threats to construction project goals (Hakkarainen, Kasanen, & Puttonen, 2019). Risk, despite being extensively studied, appears to lack a clear and shared ideal definition: risk is commonly portrayed as an undesirable, unfavorable consequence. This definition encapsulates two ideas: first, there is a well-established common understanding among experts that risk must be perceived as having both beneficial and detrimental effects.



Risk management is described as the procedure of protecting a firm's assets from shortfalls that may occur during the course of its operations, via the use of different instruments (deterrence, retention, insurance, and so on) and at the lowest possible cost. Risk management is indeed explained as the method of making plans, organizing, directing, and managing resources to attain particular goals in the face of unexpectantly good or bad incidents (Shapira, 2016). Risk management can be considered as a holistic approach and methods used to control and direct the several risks that can impact an organization's ability to achieve its goals. Risk management is the procedure of approving or rejecting a recognized or assessed risk or taking steps to reduce the repercussions or probability of an unfavorable event occurring (John & Weitz, 2017). Risk management includes making informed decisions about the acceptance or treatment of risks, and the elimination of the consequences of major events or the occurrence of dangerous events, In addition, risk management refers to the policies, procedures, procedures, and tools used to manage and accept risks (Berg, 2020). Risk management can also be defined as management activities designed to predict, measure, and evaluate risks. Manage risk by avoiding risks, reducing negative impacts, reducing impacts to acceptable levels, and developing management strategies that accept all or part of the risk outcome (Dionne, 2023).

Measures of Risk Management Strategies

Risk Identification

The role of risk identification on organizational performance Risk identification is a critical component of risk management, significantly influencing the performance and sustainability of organizations. By detecting potential risks, organizations can devise strategies to mitigate or eliminate these threats, ensuring smoother operations and better performance outcomes. This section explores how effective risk identification can enhance organizational performance. Identifying risks enables organizations to anticipate and prepare for potential challenges, thereby protecting their assets, reputation, and financial health (Aven, 2017). A thorough understanding of potential threats through risk identification allows for informed decision-making. Organizations can assess and prioritize risks based on their impact and probability, leading to more strategic allocation of resources (Hillson & Murray-Webster, 2017). For example, in the construction sector, identifying risks can prevent cost overruns and delays by foreseeing issues such as labor shortages or supply chain disruptions (Zou, Zhao, & Zhang, 2017). Tools like SWOT analysis and risk matrices help structure the identification and prioritization of risks, which enhances strategic planning and resource allocation (PMI, 2017).

Bromiley et al. (2017) demonstrate that companies with robust risk identification processes generally perform better financially, showing greater resilience to market fluctuations and economic downturns. Financial institutions with comprehensive risk identification frameworks are better positioned to handle credit, market, and operational risks, leading to enhanced financial stability and profitability (Fraser & Simkins, 2016). Businesses that fail to identify compliance risks often face legal challenges and reputational damage, which can negatively impact their performance in the long term (Power, 2017). On the other hand, effective risk management in



corporate governance and ethical conduct helps build a stronger reputation and customer trust, particularly in industries like finance and healthcare where regulatory compliance and ethical standards are crucial (Beasley et al., 2018).

Risk Assessment

Risk assessment is a critical component in the strategic management of organizations. It involves identifying, analyzing, and evaluating risks to mitigate potential negative impacts on organizational performance. The objective of this review is to examine the role of risk assessment in enhancing organizational performance. According to Fraser and Simkins (2010), risk assessment is integral to effective risk management frameworks, facilitating proactive measures rather than reactive responses to risks. Risk assessment is the overall process of risk identification, risk analysis and risk evaluation (MS ISO 31000:2010). It is considered to be the most important step for risk management because it provides a base for the right future work of the organization concerning the developing and the implementation of new programs for the risk control (Tchankova, 2018). Risk identification requires businesses to identify sources of risk, areas of impacts, events and their causes and their potential consequences in order to generate a comprehensive list of risks based on those events that might create, enhance, prevent, degrade, accelerate or delay the achievement of objectives (MS ISO 31000:2010). According to Kutsch, Browning, and Hall (2014), after risk are identified, they must be analyzed to determine which risk are most urgent and most in need of management attention. Risk analysis is performed to understand characteristics of the identified risk and it provides an input to risk evaluation and to decisions on whether risks need to be treated, and on the most appropriate risk treatment strategies and methods (MS ISO 31000:2010). Risk analysis is done to determine the identified risks and their characteristics whether they are worth of further analysis (Ahmed et al., 2007).

The Concept of Business Success

Business success is a critical concept within the field of organizational studies and management, encompassing the achievement of strategic objectives and sustained growth that enables firms to thrive in competitive environments. The definition of business success varies across different contexts but generally involves attaining financial profitability, market competitiveness, customer satisfaction, and organizational sustainability (Richard, Devinney, Yip, & Johnson, 2009). According to Brigham and Ehrhardt (2016), business success can be operationally defined as the ability of an organization to generate consistent profits, maintain positive cash flows, and create value for stakeholders over time.

Conceptually, business success extends beyond financial metrics to include qualitative aspects such as innovation, employee satisfaction, brand reputation, and adaptability to environmental changes. Parasuraman, Zeithaml, and Berry (1988) emphasize that delivering high-quality products and services that meet or exceed customer expectations is integral to business success, as it fosters customer loyalty and competitive advantage. This customer-centric approach has been



widely accepted as a fundamental driver of sustained success in various industries (Kandampully, Zhang, & Jaakkola, 2018).

Measures of Business Success

Profitability

Profitability is a fundamental construct in business management, finance, and strategic decision-making. It reflects the capacity of a business entity to generate earnings relative to its costs, assets, or equity over a specified period. As an essential indicator of organizational performance and sustainability, profitability influences not only internal resource allocation and operational efficiency but also external perceptions from investors, creditors, and regulatory bodies (Brigham & Houston, 2019). The concept is multidimensional, encompassing various measures including gross profit, operating profit, net profit, return on investment (ROI), and return on equity (ROE), each offering distinct insights into different aspects of financial health and strategic effectiveness (Wild et al., 2014). According to Gitman et al. (2015), profitability serves as the primary goal of any commercial enterprise, underpinning its ability to survive, grow, and deliver value to stakeholders. High levels of profitability are associated with competitive advantage, market leadership, and operational excellence, whereas persistently low profitability may indicate structural inefficiencies, poor strategic positioning, or external market pressures. As such, profitability is not only an outcome variable but also a key input in strategic planning, pricing decisions, and performance evaluation.

Market Share

Market share is a critical metric in strategic marketing and competitive analysis, representing the proportion of total sales in a particular market captured by a firm over a defined period. It serves not only as a quantitative indicator of a firm's market presence but also as a proxy for competitive strength, operational efficiency, and brand dominance within an industry (Kotler & Keller, 2016). Defined as the ratio of a firm's sales volume or revenue to the total market volume or revenue. market share is frequently used to benchmark performance relative to competitors and to assess the effectiveness of marketing and strategic initiatives (Jobber & Ellis-Chadwick, 2019). According to Armstrong and Kotler (2017), increasing market share is often a primary objective of growth strategies such as market penetration and product development, given that a larger market share typically correlates with greater economies of scale, stronger bargaining power, and enhanced brand recognition. However, while a rising market share may imply superior performance, it must be contextualized within industry dynamics, including profitability levels, market growth rate, and customer loyalty. Scholars such as Buzzell, Gale, and Sultan (1975) argued through the Profit Impact of Market Strategies (PIMS) framework that firms with higher market shares tend to exhibit above-average profitability, due to cost advantages and brand preference.



Risk Identification and Business Success

Empirical studies validate the positive impact of risk identification on performance. For example, Gatzert and Martin (2018) found that European insurance companies with comprehensive risk identification frameworks had better financial health and customer satisfaction. Similarly, Hopkin (2018) noted that risk identification was key to managing cybersecurity threats, thereby protecting data integrity and customer trust. In the construction industry, Zou et al. (2017) showed that effective risk identification reduced project delays and cost overruns, emphasizing the value of risk management tools and techniques throughout the project lifecycle. Despite its importance, risk identification faces challenges such as global operational complexity, rapid technological changes, and cognitive biases. Andersen and Schrøder (2017) highlight that addressing these challenges requires advanced analytical tools and a culture that fosters risk awareness. Integrating risk identification into existing processes and systems can be facilitated by adopting standardized risk management frameworks like ISO 31000 and providing adequate training and support (ISO, 2018).

Risk Assessment and Business Success

Organizations that implement robust risk assessment practices are better equipped to make strategic decisions that align with their risk tolerance and business success goals. According to Hopkin (2018), integrating risk assessment into strategic planning allows organizations to allocate resources more effectively to high-risk areas, thereby enhancing performance. McNeil, Frey, and Embrechts (2015) support this by highlighting that organizations that incorporate risk assessment into their strategic frameworks can optimize resource distribution based on risk exposure. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2017) underscores the necessity of risk assessment for developing resilient organizations capable of enduring and recovering from unforeseen disruptions. Lam (2014) adds that effective risk assessment practices also help organizations comply with evolving regulations and maintain industry reputation.

Nocco and Stulz (2006) assert that companies with well-developed risk management practices, including comprehensive risk assessment, tend to exhibit superior financial performance and market valuation compared to those with less effective practices. However, risk assessment is not without its challenges. Issues such as identifying and quantifying risks, data accuracy, and organizational resistance can impede the effectiveness of risk assessment. Aven (2016) points out that subjective judgments and biases can skew risk assessment outcomes, potentially leading to less optimal decision-making. To overcome these challenges, organizations should adopt thorough risk assessment methodologies and utilize technology to improve accuracy and reliability.

Methodology

The cross sectional survey research design was adopted for the study. The population of this study consisted of Fifteen (15) bottled waters companies registered with the companies and allied matter and licenced by (NAFDAC) National Agency for Food and Drug Administration which has been in operation for over 10 years and above. The sample size comprised of the entire population of the study given that the population of table water producing firms in the study was manageable. A



total of 60 managers spanning from 4 departments (Production, Marketing, Quality Assurance and Human Managers) were selected as key respondents for the study. The structured questionnaire titled "Risk Management Strategies and Business Success Index (RMSBSI) was adopted for the study. A rating scale ranging from 1=strongly agreed to 4= strongly disagreed was used to measure the variables. Data needed for this study was collected from the primary sources. A total of 60 questionnaires was distributed, 55 was returned. To ensure the validity of the instruments for this study, the content and face validity was adopted in ascertaining the extent to which the instrument can be said to be accurate and precise in the measurement of the variables under investigation. The Cronbach alpha was adopted in assessing the reliability of the study instrument. items which return alpha coefficients of 0.7 and above was considered as being suitable and adequate for inclusion in the analysis, while items which return a Cronbach alpha less than 0.7 was considered as unsuitable and unqualified for inclusion in the analysis. The study variables were analyzed using the mean and standard deviations. Descriptive statistics was used to analyze the answers rating on a 4-likert scale. It was decided to accept the study question items with a mean rating of 2.5. Utilizing Spearman Rank Order Correlation, hypotheses were evaluated at 0.05 degree of significance.

Table 1: Item-Total Statistics

	Items	Cronbach's Alpha if Item Deleted
Risk Identification	4	.724
Risk Assessment	4	.716
Profitability	4	.714
Market Share	4	.733
Environmental Factors	4	.721

Source: Survey Data, 2025

Test of Hypotheses

Risk Identification and Profitability

Ho1: There is no significant relationship between risk identification and profitability of bottled water companies in Rivers state

Table 6: Correlations of Risk identification and profitability

			Risk	Profitability
			Identification	
Spearman's rho	Risk Identification	Correlation Coefficient	1.000	.698**
		Sig. (2-tailed)		.000
		N	55	55
		Correlation Coefficient	.698**	1.000
	Profitability	Sig. (2-tailed)	.000	
		N	55	55
**. Correlation is	significant at the	e 0.01 level (2-tailed).		

Source: Survey Data, 2025



Table 6 above reveals r value of 0.698 at a P=0.00<0.05 for the hypothesis relating Risk identification and profitability. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho₁) which states that there is no significant relationship between Risk identification and profitability of bottled water companies in Rivers state was rejected and the alternate (Ha₁) was accepted. This implies that there is a high positive relationship between Risk identification and profitability of bottled water companies in Rivers state.

Risk Identification and Market Share

Ho2: There is no significant relationship between Risk identification and market share of bottled water companies in Rivers state

Table 7: Correlations of Risk identification and Market Share

			Risk	Market Share
			Identification	
Spearman's rho	Risk Identification	Correlation Coefficient	1.000	.888**
		Sig. (2-tailed)		.000
		N	55	55
	Market Share	Correlation Coefficient	.888**	1.000
		Sig. (2-tailed)	.000	
		N	55	55
**. Correlation is	s significant at tl	ne 0.01 level (2-tailed).		

Source: Survey Data, 2025

Table 7 above reveals r value of 0.888 at a P=0.00<0.05 for the hypothesis relating Risk identification and market share. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho₂) which states that there is no significant relationship between Risk identification and market share of bottled water companies in Rivers state was rejected and the alternate (Ha₂) was accepted. This implies that there is a very high positive relationship between Risk identification and market share of bottled water companies in Rivers state.

Risk Assessment and Profitability

Ho3: There is no significant relationship between risk assessment and profitability of bottled water companies in Rivers state.

Table 8: Correlations of Risk Assessment and Profitability

			Risk Assessment	Profitability
Spearman's rho	Risk Assessment	Correlation Coefficient	1.000	.545**
		Sig. (2-tailed)		.000
		N	55	55
	Profitability	Correlation Coefficient	.545**	1.000
		Sig. (2-tailed)	.000	
		N	55	55
**. Correlation is	significant at t	he 0.01 level (2-tailed).		



Source: Survey Data, 2025

Table 8 above reveals r value of 0.545 at a P=0.00<0.05 for the hypothesis relating Risk assessment and profitability. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho₃) which states that there is no significant relationship between Risk assessment and profitability of bottled water companies in Rivers state was rejected and the alternate (Ha₃) was accepted. Nevertheless, considering our decision rule with a calculated correlation coefficient of 0.545, the result implies that there is a moderate positive relationship between Risk assessment and profitability of bottled water companies in Rivers state.

Risk Assessment and Market Share

There is no significant relationship between risk assessment and market share of bottled water companies in Rivers state

Table 9: Correlation of Risk Assessment and Market Share

			Risk Assessment	Market Share
Spearman's rho	Risk Assessment	Correlation Coefficient	1.000	.842**
		Sig. (2-tailed)	•	.000
		N	55	55
	Market Share	Correlation Coefficient	.842**	1.000
		Sig. (2-tailed)	.000	
		N	55	55
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: Survey Data, 2025

Table 9 above reveals r value of 0.842 at a P=0.00<0.05 for the hypothesis relating Risk assessment and market share. Since the significance value 0.00 is less than the alpha level of 0.05, the null hypothesis (Ho₄) which states that there is no significant relationship between Risk assessment and market share companies of bottled water companies in Rivers state was rejected and the alternate (Ho₄) was accepted. This implies that there is a very high relationship between of bottled water companies in Rivers state

Discussion of Findings Risk Identification and Profitability

The findings from Table 6 reveal a Pearson correlation coefficient (r) of 0.698 with a p-value of 0.00, which is less than the alpha level of 0.05. This indicates a statistically significant and strong positive relationship between risk identification and profitability among bottled water companies in Rivers State. As a result, the null hypothesis, which stated that there is no significant relationship between risk identification and profitability, was rejected, and the alternate hypothesis was accepted. This outcome suggests that effective risk identification contributes meaningfully to the profitability of bottled water companies. Similar findings have been reported in previous studies. Fatoki (2014) observed a positive relationship between risk identification and financial performance in South African SMEs, emphasizing the role of early risk detection in achieving business success. Ahmed and Manab (2016) also found that manufacturing firms in Malaysia that



engaged in structured risk identification practices experienced improved profitability. Chileshe and Kikwasi (2014) reported that effective risk identification contributed to project success and financial gains in the Tanzanian construction sector. These studies support the current finding by affirming that risk identification is a key factor in improving organizational profitability across various sectors.

Risk Identification and Market Share

The result presented in Table 7 indicates a Pearson correlation coefficient (r) of 0.888 with a significance value (p) of 0.00, which is below the accepted alpha level of 0.05. This demonstrates a statistically significant and very strong positive relationship between risk identification and market share among bottled water companies in Rivers State. This finding is consistent with earlier research. Hassan and Ibrahim (2015) found a strong positive relationship between proactive risk identification and market performance among FMCG companies in Nigeria, highlighting the role of risk management in market competitiveness. Similarly, Oladokun and Gbadegesin (2017) reported that firms with structured risk identification systems tend to experience greater customer retention and expansion in market share. In the same vein, Manab, Hussin, and Kassim (2013) argued that organizations that integrate enterprise risk management practices, beginning with risk identification, are more likely to outperform competitors in terms of market growth and positioning. These studies align with the present findings and reinforce the conclusion that risk identification is not only critical for internal stability but also for gaining and sustaining competitive advantage in dynamic business environments.

Risk Assessment and Profitability

The findings presented in Table 8 indicate a Pearson correlation coefficient (r) of 0.545 with a significance value (p) of 0.00, which is less than the alpha level of 0.05. This result confirms a statistically significant relationship between risk assessment and profitability among bottled water companies in Rivers State. Based on the decision rule, the null hypothesis (Ho3), which stated that there is no significant relationship between risk assessment and profitability, was rejected, while the alternate hypothesis (Ha3) was accepted. This finding is supported by similar research. Aven and Renn (2010) emphasized that organizations that engage in systematic risk assessment are better positioned to manage uncertainty and improve performance outcomes. In a study on SMEs in Ghana, Asare and Prempeh (2016) found that risk assessment contributed positively to financial stability and profitability by enabling firms to anticipate and respond to emerging threats. Additionally, Nocco and Stulz (2006) argued that firms integrating enterprise-wide risk assessment into their strategic planning processes tend to make more informed and profitable decisions.

Risk Assessment and Market Share

The findings in Table 9 show a Pearson correlation coefficient (r) of 0.842 with a significance value (p) of 0.00, which is below the alpha level of 0.05. This indicates a statistically significant and very strong positive relationship between risk assessment and market share among bottled



water companies in Rivers State. Therefore, the null hypothesis (Ho4), which stated that there is no significant relationship between risk assessment and market share, was rejected, and the alternate hypothesis (Ha4) was accepted. Similar studies support this finding. For example, Manab, Hussin, and Kassim (2013) found that companies that integrate comprehensive risk assessment into their business strategies tend to achieve greater market growth and competitive advantage. Hassan and Ibrahim (2015) also reported a strong positive link between risk assessment practices and market performance in Nigerian FMCG firms. Additionally, Oladokun and Gbadegesin (2017) concluded that firms with robust risk assessment processes are better equipped to maintain and grow their market share.

Conclusion

This study examined the relationship between risk management strategies and business success of bottled water companies in Rivers State, focusing on risk identification and risk assessment in relation to profitability and market share. The findings revealed that both risk identification and risk assessment have significant positive relationships with profitability and market share. This implies that companies that effectively identify and assess risks are more likely to improve their financial performance and maintain or grow their market presence. Overall, the study concludes that effective risk management strategies are essential for enhancing the business success of bottled water companies in Rivers State.

Recommendations

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

- 1. Bottled water companies in Rivers State should institutionalize structured risk identification processes across all levels of operation
- 2. Bottled water companies should incorporate risk identification as a core component of their marketing and expansion strategies
- **3.** Bottled water companies should adopt a more structured and data-driven approach such as SWOT analysis, risk matrices, or probabilistic modeling to determine risk assessment.
- **4.** Bottled water firms must ensure that risk assessment outcomes are directly aligned with strategic goals for market leadership.

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