

Risk Management Practices and Business Sustainability in MTN Telecommunication Company in Enugu State

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Abstract

This study examined the effect of risk management practices on business sustainability in MTN Telecommunication Company, Enugu, Nigeria. Specifically, it investigated the effects of risk assessment methodologies, proactive financial risk planning, and crisis preparedness strategies on operational efficiency, economic resilience, and business continuity respectively. The study was underpinned by resource-based view theory, stakeholders theory, etc. The study adopted a cross-sectional survey design, targeting 180 employees across various management levels, with a sample of 124 respondents determined using Taro Yamane formula. Data was collected via structured questionnaire and analyzed using linear regression through SPSS v 25. The findings revealed that risk assessment methodologies significantly enhanced operational efficiency($R=0.759, R^2=0.576, \beta=0.681, p < 0.05$), proactive financial risk planning improved economic resilience($R=0.888, R^2=0.789, \beta=0.958, p < 0.05$), and crisis preparedness strategies positively influenced business continuity($R=0.774, R^2=0.599, \beta=0.813, p < 0.05$). The study recommended that MTN and similar firms should strengthen operational, financial, and crisis risk frameworks to achieve long-term sustainability, resilience, and competitive advantage.

Keywords: Risk Management Practices; Business Sustainability; Economic Resilience; Business Continuity and Operational Efficiency

Introduction

The mobile telecommunications industry has emerged as a central driver of global economic development, enabling communication, digital connectivity, and seamless information exchange across societies. According to Khaskhelly, Jamali, and Kumar (2023), the sector continues to evolve rapidly, driven by technological innovation and rising consumer demands, but it also faces significant sustainability challenges. To remain competitive in this highly dynamic environment, firms must adopt comprehensive risk management strategies that safeguard long-term survival and ensure resilience against multiple threats. Risk management in this sector involves identifying, assessing, and mitigating uncertainties related to economic volatility, environmental challenges,

regulatory changes, technological disruptions, and operational inefficiencies (Khaskhelly *et al.*, 2023). Business sustainability in telecommunications is a multidimensional construct encompassing financial viability, environmental stewardship, regulatory compliance, and technological innovation. As Al-Debei and Fitzgerald (2010) explain, financial sustainability requires maintaining profitability amid economic fluctuations, while environmental sustainability demands reducing energy use and limiting greenhouse gas emissions through sustainable practices. Regulatory compliance involves aligning with legal requirements at both national and international levels, and technological innovation requires firms to embrace emerging technologies to enhance service delivery while simultaneously managing new risks. Failure to adequately address these dimensions exposes

companies to financial instability, reputational damage, and costly legal sanctions (Al-Debei & Fitzgerald, 2010).

A major sustainability challenge arises from the sector's environmental impact. Telecommunications infrastructure ranging from cell towers to data centers requires significant energy consumption, thereby contributing to greenhouse gas emissions. As Khaskhelly *et al.* (2023) argue, addressing this issue necessitates the adoption of renewable energy sources, energy-efficient infrastructure, and innovations such as solar-powered base stations and optimized data center cooling systems. Similarly, Mihailović (2018) emphasizes that sustainable practices are no longer optional but a strategic necessity for maintaining competitiveness.

The industry's shift from voice-based services to data-driven platforms has introduced new layers of technological and cybersecurity risks. As Kibor and Loshin (2022) note, increased reliance on artificial intelligence (AI), cloud computing, and big data analytics has heightened vulnerabilities to cyber threats, data breaches, and system failures. Protecting sensitive customer data and ensuring regulatory compliance therefore requires firms to establish robust cybersecurity frameworks, enhance encryption technologies, and adopt strong governance mechanisms. Weak governance and poor data management practices can undermine data integrity, disrupt communication flows, and erode consumer trust (Kibor & Loshin, 2022).

More so, the highly competitive nature of the telecommunications sector pressures firms to adopt disruptive technologies such as block chain, Internet of Things (IoT), and AI. These technologies improve service delivery and differentiation but also create risks such as integration difficulties, system malfunctions, and regulatory uncertainties (Mihailović, 2018). In addition, global supply chain dependencies expose companies to geopolitical tensions, logistics bottlenecks, and supplier reliability issues. According to Rezghdeh and Shokouhyar (2020), the adoption of sustainable supply chain management practices including ethical sourcing, waste reduction, and digital transparency tools have become a strategic necessity.

The regulatory landscape further compounds the risks telecommunications companies face. Non-

compliance with licensing requirements, taxation frameworks, and consumer protection laws can result in fines, penalties, or loss of operating licenses. Al-Debei and Fitzgerald (2010) argue that proactive engagement with regulators and integration of legal risk assessment into strategic planning are indispensable for ensuring long-term sustainability. Financial risks, including currency fluctuations and high capital investment needs, also threaten firm performance, requiring strategies such as diversification of revenue sources and risk-adjusted investment planning.

Operational risks remain another critical concern. Service disruptions, infrastructure breakdowns, and equipment malfunctions not only lead to financial losses but also erode customer trust. Firms are therefore investing in AI-powered predictive maintenance systems, disaster recovery mechanisms, and resilient network infrastructures to mitigate these risks (Khaskhelly *et al.*, 2023). Additionally, corporate social responsibility (CSR) initiatives are increasingly seen as integral to sustainability. Firms that prioritize ethical conduct, employee welfare, and community engagement build stronger stakeholder trust and brand loyalty. CSR activities such as digital literacy programs, environmental initiatives, and community development projects enhance legitimacy and corporate reputation.

The mobile telecommunications industry operates within a highly volatile and complex environment where effective risk management is indispensable for achieving sustainability. Companies must address an array of risks environmental, financial, technological, operational, and regulatory while simultaneously fostering innovation, ensuring data integrity, and embracing social responsibility. As Khaskhelly *et al.*, (2023) conclude, the ability to design and implement integrated risk management frameworks will determine the extent to which telecommunications firms can strengthen resilience, adapt to market uncertainties, and secure long-term value for stakeholders.

Statement of the Problem

In today's highly dynamic and competitive telecommunications industry, companies face numerous risks, including financial instability, regulatory challenges, cyber threats, operational

inefficiencies, and market uncertainties. MTN Telecommunication Company in Enugu, Nigeria, operates in an environment where these risks can significantly impact its long-term sustainability. The ever-changing regulatory landscape in Nigeria, coupled with economic fluctuations and evolving technological trends, poses a constant challenge for the company to maintain operational efficiency and market dominance. Without a well-structured risk management framework, the company may struggle to navigate these uncertainties effectively.

Despite the critical role of risk management practices in ensuring business continuity and sustainable growth, there are concerns regarding the effectiveness of these strategies in mitigating potential threats. Issues such as poor regulatory compliance, inadequate risk assessment frameworks, and insufficient crisis management mechanisms may expose the company to financial losses, reputational damage, and operational disruptions. Moreover, risks associated with cyberattacks and data breaches continue to rise, threatening the security of customer information and overall business operations. A lack of proactive measures could result in regulatory penalties, reduced customer confidence, and declining revenue.

Given these challenges, it is essential to assess the risk management practices adopted by MTN Telecommunication Company in Enugu and determine their effectiveness in ensuring business sustainability. This study will investigate the extent to which risk management influences the company's financial performance, regulatory compliance, operational resilience, and customer trust.

Objectives of the study

The main objective of the study is to examine risk management practices and business sustainability in MTN Telecommunication company in Enugu Nigeria, while the specific objective are to

- i. Examine the Role of Risk Assessment Methods on Operational Efficiency.
- ii. Analyze the Role of Financial Risk Planning on Economic Resilience.
- iii. Measure the Effectiveness of Crisis Preparedness on Business Continuity.

Research Questions

. How do different risk assessment methodologies influence the operational efficiency of mobile telecommunication companies in Enugu?

What is the effect of proactive financial risk planning on the economic resilience of mobile telecommunication companies in Enugu?

To what extent does the implementation of crisis preparedness strategies affect business continuity in mobile telecommunication companies in Enugu?

Research hypotheses

(H₁): Implementing different risk assessment methodologies significantly influences the operational efficiency of MTN mobile telecommunication companies in Enugu.

. (H₁): Proactive financial risk planning does affect the economic resilience of MTN mobile telecommunication companies in Enugu.

H₁): The implementation of crisis preparedness strategies has a significant effect on business continuity in MTN mobile telecommunication companies in Enugu.

Review of Related Literature

Conceptual Review: Concept of Risk Management Practices

Risk management is a systematic and strategic process essential for organizations aiming to safeguard their assets, ensure operational continuity, and enhance decision-making (Card, 2014). It involves the identification, assessment, and prioritization of risks, followed by coordinated actions to mitigate, monitor, and control the likelihood or impact of adverse events (Hiebl & Keller, 2019). This definition aligns with established frameworks such as ISO 31000, which promotes a holistic approach to managing risks across organizations (James, 2020). The structured nature of risk management necessitates the development of robust policies and procedures, fostering a proactive risk-aware culture and improving overall organizational effectiveness (Hiebl, Kratz, & Richter, 2019).

(Indicators of Risk Management Practice)

Risk Assessment Methods

Risk assessment is a fundamental component of risk management, enabling organizations to identify, evaluate, and mitigate potential threats systematically (Wang, 2019). Various frameworks and methodologies have been developed to address risk assessment across multiple sectors, including healthcare, environmental management, and information security. These methods provide structured approaches to quantifying risks and formulating effective response strategies, ensuring organizational resilience and operational continuity (Kaya & Ozdemir, 2018).

Financial Risk Planning

Financial risk planning is a fundamental aspect of organizational strategy, crucial for ensuring stability and sustainability in volatile environments (Saeidi, Sofian, & Saeidi, 2020). Effective frameworks allow businesses to anticipate and mitigate risks that threaten financial performance. By implementing structured risk assessment tools, firms can safeguard assets, optimize decision-making, and maintain competitive advantage (Namuli & Segawa, 2023).

The integration of intellectual capital into financial risk planning improves resilience by leveraging human expertise, relationships, and knowledge assets (Jiang & Fronda, 2023). Firms that incorporate these elements within their financial strategies often exhibit greater adaptability. Tao, Yang, and Li (2014) stress that credit and investment controls are particularly vital in volatile industries such as real estate. Similarly, transitions in energy markets present risks that require adaptive financial responses (Köberle, Wang, & Zhang, 2022).

Concept of Business Sustainability

According to Rudnicka (2017) business sustainability involves the integration of sustainable practices into the business model. This includes adopting strategies that not only focus on financial performance but also consider the environmental and social impacts of business activities. For instance, sustainable business models are designed to create value for stakeholders while minimizing

negative environmental impacts. They often incorporate principles of corporate social responsibility (CSR), which serves as a framework for businesses to engage in ethical practices that contribute to sustainable development (Behringer & Szegedi, 2016; Atiq & Karataş-Özkan, 2013). The relationship between CSR and sustainability is particularly significant, as CSR initiatives can enhance a company's reputation and foster customer loyalty, ultimately contributing to long-term success (Sode & Chenji, 2022; Bansal & DesJardine, 2014). Business sustainability is a multifaceted concept that requires a holistic approach to integrate economic, social, and environmental considerations into business operations. By adopting sustainable practices and fostering a culture of responsibility, organizations can achieve long-term success while contributing positively to society and the environment. The interplay between CSR, innovation, and strategic management is crucial for businesses aiming to thrive in an increasingly sustainability-focused marketplace.

(Indicators Of Business Sustainability)

Operational Efficiency

According to (Slack, 2010), Operational efficiency refers to the effective utilization of organizational resources to maximize outputs while minimizing costs and waste. It evaluates both the qualitative and quantitative aspects of performance, aiming to deliver best practices that improve productivity and customer satisfaction.

Process Optimization: At the heart of operational efficiency lies process optimization, which involves refining organizational procedures to enhance productivity and reduce waste. Lean manufacturing and Six Sigma are prominent methodologies employed to achieve these objectives. Lean manufacturing focuses on eliminating non-value-adding activities, thereby streamlining operations and reducing costs. Six Sigma, on the other hand, utilizes statistical tools to minimize process variability and defects, ensuring consistent quality. By integrating these approaches, organizations can create a culture of continuous improvement, leading to superior operational performance.

Economic resilience: Economic resilience has emerged as a fundamental concept in understanding how economies adapt, recover, and thrive amidst various shocks and disruptions. It represents the capacity of an economic system to withstand, endure, and rebound from external adversities, such as financial crises, natural disasters, and socio-political upheavals (Du 2023).

A significant theme in contemporary research is the interplay between financial resilience and broader economic resilience. Hendri & Usman (2023) emphasize that financial resilience is a cornerstone of economic adaptability, providing individuals, businesses, and governments with the necessary buffer to navigate economic uncertainties. This interplay highlights the importance of integrating financial literacy and risk management strategies into the broader framework of economic resilience. Voznyak (2023) further reinforce this connection, arguing that robust financial systems are critical in ensuring the overall economic resilience of a region.

Business Continuity:

Business continuity is a fundamental aspect of organizational resilience, ensuring that essential functions persist during and after disruptions. It encompasses strategic planning, dynamic capabilities, employee training, leadership competencies, digital transformation, and crisis learning. A comprehensive business continuity strategy enables organizations to effectively navigate crises, minimize financial losses, and sustain long-term stability.

Dynamic Capabilities in Business Continuity: The ability to adapt and respond dynamically to crises is critical for business continuity. Mansour *et al.*, (2023) highlight that organizations, particularly in the tourism sector, benefit significantly from developing dynamic capabilities. Their study on Libyan tourism organizations demonstrates how firms can create alternative operational strategies during crises to maintain service delivery and financial stability. This adaptability underscores the broader need for organizations across industries to establish flexible crisis management mechanisms that enhance resilience and business continuity.

Pandemic Preparedness and Business Continuity

The COVID-19 pandemic underscored the importance of pandemic preparedness in sustaining business operations. Coccia *et al.*, (2017) assert that countries with well-funded healthcare systems and established preparedness measures experience better public health and economic outcomes during pandemics. Organizations must integrate pandemic-specific strategies into their business continuity plans, including supply chain diversification, remote work infrastructures, and robust health and safety protocols. These measures mitigate the operational and financial impact of global health crises, ensuring long-term sustainability.

Disaster Preparedness in Healthcare Settings:

Healthcare organizations are particularly vulnerable to crises, making disaster preparedness a key element of business continuity. Goniewicz and Liu (2022) found that well-structured risk management strategies, including planning, education, and training, significantly reduce the adverse effects of disasters on healthcare providers. Mehri *et al.* (2018) reinforce this by identifying deficiencies in hospital disaster preparedness, advocating for a systematic and integrated approach to crisis management in healthcare settings. Effective continuity planning ensures that healthcare services remain operational even during emergencies, safeguarding patient care and public health.

The Role of Leadership in Business Continuity: Leadership plays a pivotal role in shaping crisis preparedness and response. Abedini *et al.*, (2014) highlight the interconnection between leadership competencies and crisis management effectiveness, arguing that skilled leadership is essential for organizational resilience. Effective leaders foster a culture of preparedness, encouraging proactive risk assessments and decision-making that enhance business continuity. Organizations must invest in leadership development programs to cultivate crisis-ready executives capable of guiding teams through disruptions.

2.3 Theoretical framework

The Theoretical Framework Underpinning the Relationship between Risk Management Practices and Business Sustainability as follows.

2.3.1 Resource-Based View Theory (RBV) by Dewi and Sari Dewi & Sari (2024)

The Resource-Based View posits that a firm's unique resources and capabilities are critical for achieving a competitive advantage and sustaining business performance. According to Dewi and Sari Dewi & Sari (2024), effective risk management practices that incorporate both financial and non-financial risks can significantly enhance the sustainability of small and medium-sized enterprises (SMEs) post-COVID-19. By leveraging internal resources and comprehensive risk management frameworks, organizations can not only mitigate risks but also capitalize on opportunities for sustainable growth. This perspective underscores the importance of organizations developing specific capabilities related to risk management to foster long-term sustainability.

Stakeholder Theory:

Stakeholder Theory posits that organizations must manage relationships with various stakeholders to ensure long-term success. Hartmann and Moeller Hartmann & Moeller (2014) illustrate how customer expectations serve as a driving force behind the adoption of sustainable practices. The study asserts that understanding the needs and concerns of stakeholders, particularly customers, is essential for implementing risk management strategies that align with sustainability goals. By actively engaging stakeholders in the risk management process, organizations can cultivate trust and collaboration, ultimately enhancing their sustainability performance.

2.4 Empirical review

Okeke (2022) conducted a study on the effect of risk management practices on business sustainability in MTN Telecommunication Company, Nigeria. The objectives of the study were to examine the relationship between credit risk management and organizational profitability, and to assess the effect of operational risk management on service delivery

sustainability. The population of the study comprised 420 staff of MTN branches in Lagos State, with a sample size of 205 respondents determined using Taro Yamane's formula. Data were collected through structured questionnaires and interviews, and analyzed using descriptive statistics and regression analysis. The findings revealed a significant positive relationship between credit risk management and profitability, as prudent risk evaluation and monitoring reduced financial losses and enhanced long-term growth. Additionally, the study found that operational risk management strongly influenced service delivery sustainability, as effective internal controls and fraud prevention improved customer trust and loyalty. The study concluded that risk management practices are indispensable for organizational survival in the telecommunication sector. Based on these findings, it recommended that MTN should strengthen its risk control systems, adopt enterprise-wide risk management frameworks, and invest in digital tools and staff training to ensure long-term sustainability. Johnson & Meyer (2021) conducted a study on the role of enterprise risk management in enhancing sustainability among telecommunication firms in South Africa. The objectives of the study were to investigate the relationship between strategic risk management and organizational resilience, and to assess the impact of regulatory compliance on long-term business sustainability. The population of the study comprised 312 employees drawn from three leading telecom operators, with a sample size of 175 respondents determined using Krejcie and Morgan's sample size table. Data were collected through structured questionnaires and semi-structured interviews. Analysis was done using correlation and regression techniques. The findings revealed a significant positive relationship between strategic risk management and organizational resilience, as firms that proactively identified and mitigated strategic risks adapted more effectively to environmental uncertainties. Furthermore, the study found that compliance with regulatory frameworks had a direct positive impact on sustainability, as adherence to policies reduced legal risks and improved corporate reputation. The study concluded that enterprise risk management strengthens both operational continuity and stakeholder confidence in

the telecom industry. Based on these findings, it recommended that telecommunication companies should integrate risk management into strategic planning and continuously review regulatory policies to sustain competitiveness and resilience.

Garcia, Brown, and Smith (2020) conducted a study on the effect of risk management practices on business continuity in telecommunication companies in the United Kingdom. The objectives of the study were to examine the relationship between technological risk management and service reliability, and to evaluate the influence of financial risk management on business sustainability. The population of the study consisted of 280 staff across four major telecommunication firms, while a sample size of 162 respondents was selected using stratified random sampling. Data were collected through structured questionnaires and focus group discussions, and analyzed using descriptive statistics and multiple regression analysis. The findings revealed a significant positive relationship between technological risk management and service reliability, as investments in cyber security and IT infrastructure minimized disruptions and enhanced customer confidence. In addition, the study found that effective financial risk management practices, such as hedging and credit monitoring, improved organizational sustainability by reducing losses from market volatility. The study concluded that risk management strategies are critical to sustaining competitiveness in the telecom industry. Based on these findings, it recommended that telecommunication firms should adopt advanced technological solutions for risk monitoring and develop comprehensive financial risk policies to enhance long-term stability and growth.

Okafor (2022) conducted a study on the relationship between enterprise risk management and organizational sustainability in telecommunication firms in Lagos State, Nigeria. The objectives of the study were to investigate the effect of operational risk management on service delivery and to assess the impact of regulatory risk management on long-term business survival. The population of the study consisted of 420 employees drawn from three telecommunication firms, while a sample size of 201 respondents was determined using Taro Yamane's formula. Data were collected through structured

questionnaires and interviews, and analyzed using descriptive statistics and regression analysis. The findings revealed that operational risk management had a significant positive effect on service delivery, as organizations that implemented preventive maintenance and disaster recovery plans reported higher service reliability. Furthermore, regulatory risk management showed a strong influence on organizational sustainability, as compliance with government policies and industry standards reduced the likelihood of sanctions and reputational damage. The study concluded that enterprise risk management enhances business sustainability by improving operational efficiency and compliance. Based on these findings, it recommended that telecommunication companies should strengthen operational risk policies and engage proactively with regulators to ensure business continuity and growth. Zhang and Lee (2021) conducted a study on the role of risk management frameworks in promoting sustainability within Asian telecommunication companies. The objectives of the study were to examine the relationship between strategic risk management and competitive advantage, and to assess how supply chain risk management influences long-term business resilience. The population of the study comprised 310 employees from five leading telecom companies in South Korea and China, with a sample size of 174 respondents selected using proportionate stratified sampling. Data were collected using structured questionnaires and semi-structured interviews, and analyzed through descriptive statistics and structural equation modeling (SEM). The findings revealed that strategic risk management had a significant positive relationship with competitive advantage, as firms that adopted proactive risk identification and planning outperformed their rivals in innovation and market adaptability. The study also found that supply chain risk management strongly contributed to business resilience, with companies that diversified suppliers and implemented robust procurement policies reporting reduced vulnerability to disruptions. The study concluded that integrating comprehensive risk management frameworks into core business strategies enhances both sustainability and competitiveness. Based on these findings, it recommended that telecommunication firms in Asia

should strengthen their supply chain partnerships and adopt forward-looking risk strategies to ensure business continuity in dynamic markets.

Materials and method

The study adopted a cross-sectional research design. Primary and secondary sources of data were used. The population of the study is made up of the entire staff of MTN Telecommunication Company in Enugu including top management, middle management, supervisors and low-level employees of the telecommunication in Enugu state. . The study also considered both permanent and none permanent staff with this company, thus making the total population to be one hundred and eighty (180) employees and this formed the sample frame of the

study. However a sample size was obtained through the use of Taro Yamene formula for sample size determination and sample was 124 employees. The instrument was validated through the help of experts in management, who modified and made the necessary corrections for the instrument to measure what it ought to measure while the reliability of the instrument was measure using Crombach alpha gotten a value of 0.88 indicating that the instrument was reliable .The hypotheses were tested using simple linear regression

Data Presentation, Analyses and Discussion

Data Presentation

The table below shows the number of questionnaires distributed to the administrative cadre of the company, the number retrieved and the percentage.

Table 4.1: Administration of Questionnaire

S/N	Group	Distributed	Retrieved	Invalid	Valid	% of Valid
1	Top management	17	16	1	15	12.1%
2	Middle class management	31	30	2	28	22.6%
3	Supervisors	10	9	0	9	7.3%
4	Low level management	38	36	2	34	27.4%
5	Temporary / casual staff	28	27	1	26	21.0%
Total		124	118	6	112	100%

The distribution table shows that a total of 124 copies of questionnaire were administered across the five staff categories of MTN Telecommunication Company in Enugu. Out of this, 118 were retrieved, representing a high response rate. However, 6 copies of questionnaire were found invalid due to incomplete or inconsistent responses, leaving 112 valid copies of questionnaire for analysis.

Across categories, top management had 15 valid responses, accounting for 12.1% of the total. Middle class management recorded the second highest valid return with 28 responses (22.6%). Supervisors returned 9 valid copies of questionnaires, making up

7.3% of the total. The majority of responses came from low-level management with 34 valid copies returns (27.4%), followed by temporary/casual staff with 26 valid responses (21.0%). This distribution indicates good representation from all staff categories, with stronger participation from middle and lower-level employees, which enhance the reliability of the study's findings.

Test of Hypotheses

The hypotheses were analyzed with the statistical tool of linear regression through statistical package for social sciences (SPSS) 25.

Hypothesis one

(H₀): Implementing different risk assessment methodologies has no significant effect on the operational efficiency of MTN mobile telecommunication companies in Enugu.

(H₁): Implementing different risk assessment methodologies significantly influences the operational efficiency of MTN mobile telecommunication companies in Enugu.

Table 4.2: Analysis of Hypothesis one: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 ^a	.576	.573	.71492

a. Predictors: (Constant), Risk_Assessment_Methodologies

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.491	1	76.491	149.657	.000 ^b
	Residual	56.222	110	.511		
	Total	132.714	111			

a. Dependent Variable: Operational Efficiency

b. Predictors: (Constant), Risk_Assessment_Methodologies

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.947	.213		4.454	.000
	Risk_Assessment_Metho- dologies	.681	.056	.759	12.233	.000

a. Dependent Variable: operational_efficiency

The regression results in Table 4.2 examined the effect of risk assessment methodologies on operational efficiency in MTN Enugu. The Model Summary shows a correlation coefficient (R = 0.759), which indicates a strong positive relationship between the predictor (risk assessment methodologies) and the dependent variable

(operational efficiency). The R Square value of 0.576 reveals that risk assessment methodologies explain about 57.6% of the variation in operational efficiency, while the remaining 42.4% is explained by other factors not included in the model. The Adjusted R Square (0.573), which accounts for sample size, confirms the model's reliability. The ANOVA results further validate the model, with an F-statistic of 149.657 and a p-value of 0.000 (less

than 0.05). This indicates that the regression model is statistically significant and that risk assessment methodologies have a substantial impact on operational efficiency.

The coefficient table provides more specific insights. The unstandardized coefficient ($B = 0.681$) suggests that for every one-unit increase in the application of risk assessment methodologies, operational efficiency increases by 0.681 units, holding other variables constant. The standardized beta coefficient ($\beta = 0.759$) indicates that risk assessment methodologies exert a strong influence on operational efficiency. The t-value of 12.233 with a significance level of 0.000 confirms that the predictor variable is highly significant.

These findings support the hypothesis that effective risk assessment methodologies significantly enhance operational efficiency in MTN Enugu. This implies that adopting structured approaches to identifying, analysing, and mitigating risks enable the organization to streamline processes, reduce uncertainties, and sustain business performance.

Hypothesis two

(H_1): Proactive financial risk planning does not significantly affect the economic resilience of MTN mobile telecommunication companies in Enugu.

(H_2): Proactive financial risk planning does affect the economic resilience of MTN mobile telecommunication companies in Enugu.

Table 4.3: Analysis of hypothesis two:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.888 ^a	.789	.787	.59893

a. Predictors: (Constant), Proactive_Financial_Risk_Planning

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	147.532	1	147.532	411.275	.000 ^b
	Residual	39.459	110	.359		
	Total	186.991	111			

a. Dependent Variable: economic resilience

b. Predictors: (Constant), Proactive_financial_risk_planning

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	-.036	.183		-.197	.845
	Proactive_financial_risk_planning	.958	.047	.888	20.280	.000

a. Dependent Variable: economic resilience

The regression analysis in Table 4.3 assessed the effect of proactive financial risk planning on economic resilience in MTN Enugu. The Model Summary shows a very strong positive relationship ($R = 0.888$) between the predictor and the dependent variable. The R Square value of 0.789 indicates that proactive financial risk planning explains about 78.9% of the variance in economic resilience, leaving only 21.1% to other unobserved factors. The adjusted R Square (0.787), which accounts for sample size, confirms the robustness of the model. The ANOVA results reveal that the model is statistically significant, with an F-statistic of 411.275 and a p-value of 0.000 (below 0.05). This suggests that proactive financial risk planning has a highly significant effect on economic resilience. The coefficients table provides deeper insights. The unstandardized coefficient ($B = 0.958$) shows that for every one-unit increase in proactive financial risk planning, economic resilience increases by 0.958 units, holding other variables constant. The standardized beta coefficient ($\beta = 0.888$) further indicates that the predictor has a very strong

influence on the outcome variable. The high t-value (20.280) with a p-value of 0.000 confirms that proactive financial risk planning is a significant determinant of economic resilience.

In summary, the findings strongly support the hypothesis that proactive financial risk planning significantly enhances economic resilience in MTN Enugu. This implies that when the company anticipates financial uncertainties and designs preventive strategies (such as contingency funds, budget buffers, and forward-looking financial policies), it strengthens its capacity to withstand shocks and sustain long-term business operations.

Hypothesis three

(H_1) The implementation of crisis preparedness strategies does not have a significant effect on business continuity in MTN mobile telecommunication companies in Enugu.

(H_2): The implementation of crisis preparedness strategies has a significant effect on business continuity in MTN mobile telecommunication companies in Enugu.

Table 4.4: Analysis of hypothesis three:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774 ^a	.599	.595	.85310

a. Predictors: (Constant), Crisis_Preparedness_Strategies

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.444	1	119.444	164.121	.000 ^b
	Residual	80.056	110	.728		
	Total	199.500	111			

a. Dependent Variable: business continuity

b. Predictors: (Constant), crisis preparedness strategies

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.571	.252		2.267	.025
	Crisis preparedness strategies	.813	.063	.774	12.811	.000

a. Dependent Variable: Business Continuity

The regression analysis in Table 4.4 examined the effect of crisis preparedness strategies on business continuity in MTN Enugu. The Model Summary indicates a strong positive relationship ($R = 0.774$) between crisis preparedness strategies and business continuity. The R Square value of 0.599 shows that approximately 59.9% of the variation in business continuity is explained by the company's crisis preparedness strategies, while the remaining 40.1% is influenced by other factors. The Adjusted R Square (0.595) confirms the reliability of the model after accounting for sample size.

The ANOVA results reveal that the model is statistically significant, with an F-statistic of 164.121 and a p-value of 0.000 (less than 0.05). This indicates that crisis preparedness strategies significantly predict business continuity in MTN Enugu.

The coefficients table provides further insight. The unstandardized coefficient ($B = 0.813$) suggests that a one-unit increase in the adoption of crisis

preparedness strategies results in an increase of 0.813 units in business continuity, holding other factors constant. The standardized beta coefficient ($\beta = 0.774$) shows that crisis preparedness has a strong influence on business continuity. The high t-value (12.811) and p-value of 0.000 confirm the predictor's statistical significance.

Overall, the findings support the hypothesis that effective crisis preparedness strategies significantly enhance business continuity. This implies that MTN Enugu's ability to anticipate, plan for, and respond to potential crises such as network failures, cyber-attacks, or operational disruptions ensure sustained operations and minimize downtime, thereby contributing to the company's overall business sustainability.

Summary, Conclusion, Recommendations,

Summary of findings

The study examined risk management practices and business sustainability in MTN Telecommunication Company in Enugu Nigeria. The findings collectively show that effective risk management practices play a crucial role in enhancing the sustainability of MTN's business operations in Enugu. The study underscores the need for organizations to integrate risk management into their strategic and operational frameworks to achieve long-term resilience, stability, and sustainable growth. The results reveal the following:

i: The first finding revealed that risk assessment methodologies have a strong and positive effect on operational efficiency. The results indicate that when MTN applies structured and systematic risk assessment approaches, it significantly enhances operational performance, reduces uncertainties, and ensures smoother day-to-day operations. ($R=0.759, R^2=0.576, \beta=0.681, p<0.05$).

ii: The second finding showed that proactive financial risk planning significantly improves economic resilience. Employees' and management's forward-looking financial strategies enable the organization to anticipate potential economic disruptions, mitigate financial risks, and maintain stability. ($R=0.888, R^2=0.789, \beta=0.958, p<0.05$).

iii: The third finding highlighted that crisis preparedness strategies positively influence business continuity. MTN's ability to plan, prepare, and respond effectively to potential crises ensures uninterrupted service delivery and long-term sustainability. ($R=0.774, R^2=0.599, \beta=0.813, p<0.05$).

5.2 Conclusion

The study concluded that structured risk assessment methodologies, proactive financial risk planning and crisis preparedness strategies significantly enhance operational efficiency, economic resilience and business continuity respectively

Recommendation of the Study

The recommendations are based on the findings of hypotheses and aligned with the objectives of the study.

i. Enhance Risk Assessment Methodologies

Management of MTN Telecommunication Company should strengthen its risk assessment frameworks by adopting more systematic and comprehensive approaches to identifying operational risks. Regular risk audits, scenario analyses, and employee training programs on risk identification which can further improve operational efficiency and ensure that potential threats are proactively addressed.

ii. Implement Proactive Financial Risk Planning

The leadership of the company should prioritize forward-looking financial strategies to bolster economic resilience. This includes maintaining contingency funds, conducting regular financial stress tests, and integrating predictive financial modeling to anticipate potential market or economic disruptions. Such practices will help the organization sustain operations during financial uncertainties and safeguard long-term stability.

iii. Strengthen Crisis Preparedness Strategies:

Management of MTN should enhance its crisis management and business continuity frameworks by developing detailed response plans for potential operational, technological, or environmental disruptions. Regular simulation exercises, employee training on emergency protocols, and continuous evaluation of crisis preparedness measures will ensure uninterrupted service delivery and reinforce organizational sustainability.

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