

LEADERSHIP AGILITY AND ORGANIZATIONAL RESILIENCE IN UNCERTAIN BUSINESS ENVIRONMENTS (VUCA)

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ABSTRACT

This was a review of the interaction involving organizational resilience and agility in leadership in uncertain business environments (VUCA). The primary aim of the study were to determine the effect of strategic adaptability on organizational resilience and examine the effect of decision-making flexibility on organizational resilience in uncertain business environments. This investigation employed a cross-sectional survey design to examine the relationship between leadership agility and organizational resilience. Data were obtained from primary sources through the use of structured questionnaires administered to employees of selected commercial banks operating in Delta State, Nigeria. A total of 240 valid responses constituted the sample for the analysis. The collected data were processed using the Statistical Package for the Social Sciences (SPSS) Version 25, while descriptive statistics, Pearson Product Moment Correlation, and Multiple Regression Analysis were applied to test the study objectives and hypotheses. The empirical findings demonstrated that strategic adaptability exerts a statistically significant positive influence on organizational resilience within uncertain business environments ($\beta = 0.482$, $t = 8.936$, $p < 0.05$). Similarly, decision-making flexibility was found to make a significant positive contribution to organizational resilience ($\beta = 0.397$, $t = 7.824$, $p < 0.05$). The multiple regression model further revealed that the combined dimensions of leadership agility accounted for 59.0% of the observed variation in organizational resilience ($R^2 = 0.590$, $F = 156.842$, $p < 0.05$). In addition, the correlation results indicated strong and positive associations between strategic adaptability and organizational

resilience ($r = 0.711$, $p < 0.01$), as well as between decision-making flexibility and organizational resilience ($r = 0.684$, $p < 0.01$).

Based on these findings, the study concluded that organizations led by agile leaders are better positioned to withstand, respond to, and recover from the challenges posed by volatile, uncertain, complex, and ambiguous (VUCA) business environments. Accordingly, strengthening leadership agility through strategic adaptability and flexible decision-making can significantly improve organizational resilience. The study recommended that organizations should strengthen strategic adaptability practices and promote flexible decision-making systems to improve resilience, responsiveness, and long-term sustainability in turbulent business environments.

Keywords: Leadership Agility, Strategic Adaptability, Decision-Making Flexibility, Organizational Resilience, VUCA Environment.

Introduction

1. Background

Today's business landscape is marked by rapid and unpredictable changes, high levels of uncertainty, growing complexity, and ambiguous conditions, collectively referred to as the VUCA environment. These dynamic circumstances present considerable challenges to organizations in their efforts to maintain resilience, achieve sustainable growth, and remain competitive. Globalization, rapid technological advancement, economic instability, pandemics, geopolitical tensions, and changing consumer expectations have intensified the unpredictability of business operations across industries. Organizations are therefore compelled to develop adaptive capacities that enable them to respond effectively to environmental turbulence while sustaining operational continuity and long-term performance. Hence, leadership agility is a key managerial capability for navigating uncertainty and fostering organizational resilience.

Leadership agility describes a leader's capacity to think strategically, respond swiftly to changing circumstances, and make effective decisions while guiding the organization through dynamic and uncertain environments. Agile leaders possess the capacity to anticipate environmental changes, make timely decisions, encourage innovation, and inspire employees toward organizational adaptability and continuous improvement. According to Joiner (2019), leadership agility enables leaders to respond proactively to emerging challenges while maintaining organizational effectiveness. Similarly, Syamsir, Saputra, and Mulia (2025) observed that agile leadership enhances organizational responsiveness and strategic adaptability within VUCA conditions.

The increasing complexity of business operations in the VUCA era has made traditional leadership approaches insufficient for managing uncertainty and disruption. Organizations now require leaders who can embrace flexibility, creativity, collaboration, and rapid decision-making to sustain organizational performance. Agile leadership encourages learning, innovation, employee empowerment, and strategic transformation, thereby enabling organizations to cope with dynamic environmental conditions. Akkaya and Sever (2022) argued that agile leadership enhances organizational adaptability and performance by enabling firms to react punctually to green changes and marketplace disruptions.

Organizational resilience denotes an organization's capacity to foresee potential challenges, respond effectively to unexpected disruptions, adjust to changing conditions, and recover promptly while sustaining its essential operations and competitive position. Resilient organizations demonstrate flexibility, innovation, and continuity even in periods of crisis and uncertainty. Organizational resilience has become increasingly important as firms face economic shocks, technological disruptions, cybersecurity threats, and global crises that threaten business continuity. Contemporary research indicates that organizations with strong resilience capabilities are more likely to withstand periods of instability, adapt effectively to changing business conditions, and maintain a sustainable competitive advantage in highly uncertain environments. Raharja (2024) emphasized that leadership agility serves as a catalyst for organizational resilience by enhancing adaptability, strategic responsiveness, and crisis management capabilities among organizations.

The relationship between leadership agility and organizational resilience has gained growing scholarly attention because resilient organizations often depend on agile leadership practices to navigate disruptions effectively. Agile leaders create organizational cultures that promote flexibility, innovation, teamwork, and continuous learning, all of which contribute to resilience. In uncertain business environments, organizations with agile leadership structures are more capable of identifying risks, responding to environmental changes, and recovering from operational setbacks. Furthermore, leadership agility strengthens employees' confidence and commitment during crises, thereby improving organizational stability and sustainability.

Despite the growing recognition of leadership agility and organizational resilience in management literature, many organizations still struggle to develop effective leadership responses to VUCA challenges. Several firms experience difficulties adapting to rapid technological changes, economic volatility, and unpredictable market conditions due to rigid leadership structures and inadequate strategic flexibility. Consequently, there is a need for empirical investigation into how leadership agility influences organizational resilience in uncertain business environments.

Against this backdrop, the present study investigates the influence of leadership agility on organizational resilience within volatile, uncertain, complex, and ambiguous (VUCA) business environments. The study aims to enrich existing knowledge by providing empirical evidence on the extent to which agile leadership capabilities strengthen organizational adaptability, promote long-term sustainability, and improve an organization's capacity to withstand and respond effectively to environmental disruptions and uncertainty.

Study problem

The contemporary business environment is increasingly characterized by volatility, uncertainty, complexity, and ambiguity, commonly described as a VUCA environment, thereby posing serious challenges to organizational survival, sustainability, and competitiveness. Organizations across industries are confronted with rapid technological changes, economic instability, globalization pressures, changing customer expectations, cybersecurity threats, pandemics, and unpredictable market disruptions. These environmental uncertainties have made it difficult for organizations to maintain operational stability and achieve long-term strategic objectives using conventional leadership approaches. Consequently, many organizations experience reduced adaptability, declining performance, operational disruptions, and inability to respond effectively to emerging challenges. In the face of these uncertainties, organizational resilience has become a critical requirement for business continuity and survival. Organizational resilience enables firms to anticipate, adapt to, recover from, and thrive amidst disruptions and crises. However, despite the importance of resilience, many organizations still struggle to build resilient systems capable of withstanding environmental shocks. The inability of some organizations to respond swiftly to crises has often resulted in business failures, reduced employee morale, loss of market share, and poor organizational performance. This situation has raised concerns among scholars and practitioners regarding the leadership capabilities required to strengthen organizational resilience in VUCA environments.

Leadership agility has emerged as an important leadership competency for navigating uncertain business conditions. Agile leaders are expected to demonstrate flexibility, strategic responsiveness, innovation, quick decision-making, and adaptability in managing complex organizational situations. Leadership agility encourages proactive problem-solving, continuous learning, employee empowerment, and effective crisis management. These capabilities are fundamental to building and sustaining organizational resilience. Despite their importance, many organizations continue to rely on inflexible leadership systems and highly bureaucratic management practices, which constrain their capacity to adapt promptly and effectively to changing environmental conditions and unexpected disruptions.

Although previous studies have examined leadership effectiveness and organizational resilience independently, there remains limited empirical evidence on the extent to which leadership agility influences organizational resilience in uncertain business environments, particularly within the context of rapidly changing economic and organizational conditions. Furthermore, many studies have focused more on traditional leadership styles without adequately addressing the relevance of agile leadership competencies in enhancing organizational adaptability and resilience under VUCA conditions. It is against this background that this study seeks to investigate the relationship between leadership agility and organizational resilience in uncertain business environments (VUCA). The study aims to determine whether agile leadership practices can significantly enhance organizations' ability to adapt, survive, and sustain performance amidst environmental uncertainty and complexity

Study Queries

The following research questions were formulated to provide direction for the study.

- i. What is the effect of strategic adaptability on organizational resilience in uncertain business environments (VUCA)?
- ii. What is the effect of decision-making flexibility on organizational resilience in uncertain business environments (VUCA)?

Objectives of the study

The broad objective of the study is to determine the effect of Leadership Agility and Organizational Resilience in Uncertain Business Environments (VUCA). The specific objectives are to:

- i. determine the effect of strategic adaptability on organizational resilience in uncertain business environments (VUCA)
- ii. examine the effect of decision-making flexibility on organizational resilience in uncertain business environments (VUCA)

Research Hypotheses

H₀₁: there is no significant effect between strategic adaptability and organizational resilience in uncertain business environments (VUCA)

H₀₂: there is no significant effect between decision-making flexibility and organizational resilience in uncertain business environments (VUCA)

2. Literature Underpinnings

Leadership Agility

Leadership dexterity denotes to the capability of leaders to effectively forestall, familiarize, and retort rapidly to changing business conditions, uncertainties, and complex organizational challenges. It involves the capacity of leaders to think strategically, make timely decisions, embrace innovation, and guide organizations successfully through dynamic and unpredictable environments. Leadership agility enables leaders to remain flexible, resilient, and proactive while managing rapid changes in technology, market conditions, customer expectations, and global business disruptions. Agile leaders possess the ability to learn continuously, adjust leadership strategies, empower employees, and foster collaboration and innovation to ensure organizational adaptability and sustainability. According to Wu and Yusuf (2026), leadership agility refers to leaders' ability to navigate complex policy and organizational environments, reconcile competing stakeholder expectations, and translate environmental pressures into adaptive organizational strategies. Similarly, Jansen et al. (2025) described agile leadership as a strategic leadership capability that promotes adaptive thinking, decentralized decision-making, transparent communication, and continuous learning during periods of uncertainty and crisis. Leadership agility therefore emphasizes flexibility, responsiveness, and innovation in leadership practices to enable organizations to cope effectively with environmental turbulence.

Furthermore, recent studies have associated leadership agility with organizational adaptability and dynamic capabilities. Desalegn et al. (2024) explained that agility involves an organization's or leader's ability to respond swiftly and efficiently to environmental changes while maintaining operational effectiveness and competitiveness. This suggests that agile leaders are capable of sensing emerging opportunities and threats, initiating strategic responses, and mobilizing organizational resources effectively under uncertain conditions. Therefore, leadership agility can be viewed as the capability of leaders to remain adaptive, innovative, flexible, and responsive in managing organizations amidst continuous change and uncertainty. It is an essential leadership competency for promoting organizational resilience, strategic adaptability, and sustainable performance in contemporary business environments.

Resilience in Organisation

Organizational resilience is the capacity of an organization to identify potential threats, prepare for unforeseen events, respond effectively to disruptions, adapt to changing circumstances, and recover efficiently while sustaining its essential functions and ensuring long-term viability. It mirrors an establishment's ability to withstand environmental shocks, manage crises effectively, and continue functioning successfully despite adverse conditions. Within today's dynamic business landscape, characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), organizational resilience

has emerged as a critical capability for sustaining business operations, preserving competitive advantage, and ensuring long-term organizational survival. Organizational resilience involves flexibility, adaptability, innovation, learning, and effective resource management that enable organizations to cope with environmental turbulence and operational disruptions. Resilient organizations are capable of identifying emerging threats and opportunities, responding strategically to crises, and transforming challenges into opportunities for growth and improvement. According to Hillmann and Guenther (2021), organizational resilience is the capability of organizations to absorb strain, recover critical functionality, and thrive in altered circumstances following disruptions. This definition highlights the importance of adaptability and sustainability in organizational operations.

Similarly, Bhamra, Dani, and Burnard (2023) explained that organizational resilience encompasses proactive and reactive organizational capabilities that support effective crisis management, operational continuity, and strategic adaptation during periods of uncertainty and disruption. Resilient organizations therefore develop systems, structures, and leadership practices that promote rapid response, learning, and continuous improvement in the face of environmental challenges. Contemporary research has increasingly highlighted the strategic importance of organizational resilience in maintaining organizational performance during periods of crisis and disruption. Nwagbara and Osuali (2024) noted that organizational resilience enables firms to maintain stability and competitiveness by fostering adaptability, innovation, employee collaboration, and strategic responsiveness under turbulent business conditions. They argued that resilient organizations are more capable of recovering from economic shocks, technological disruptions, and global crises than organizations with weak adaptive capacities. Furthermore, organizational resilience is increasingly linked with leadership effectiveness, organizational culture, and strategic agility. Ducheck (2020) asserted that resilience is not merely the ability to survive disruptions but also the capacity to learn, renew, and emerge stronger after crises. This perspective suggests that resilient organizations continually develop adaptive competencies and innovative capabilities that enhance long-term organizational sustainability. Therefore, organizational resilience can be understood as the dynamic capability of organizations to anticipate, adapt, recover, and grow amidst disruptions and uncertainties. It is an essential organizational attribute for sustaining performance, competitiveness, and continuity in contemporary uncertain business environments.

Uncertain Business Environments (VUCA)

Uncertain Business Environments, commonly described using the acronym VUCA, refer to business conditions characterized by instability, vagueness, intricacy, and indistinctness. The term **VUCA** was originally developed by the United States Army War College to describe environments characterized

by rapid change and unpredictability. Over time, the concept has been extensively adopted in management and organizational research as a framework for understanding the dynamic, uncertain, and highly complex nature of contemporary business environments. In contemporary organizations, VUCA conditions arise from rapid technological advancements, globalization, economic instability, changing customer preferences, geopolitical tensions, pandemics, and intense market competition, all of which create challenges for organizational decision-making and strategic planning. Volatility refers to the speed, magnitude, and unpredictability of changes occurring within the business environment. It reflects situations where market conditions, technologies, or organizational circumstances change rapidly and unexpectedly. Uncertainty relates to the inability of organizations to accurately predict future events or outcomes due to insufficient information or unstable environmental conditions. Complexity describes the interconnectedness of multiple factors, stakeholders, and variables that make organizational decision-making difficult. Ambiguity refers to unclear situations where information may be incomplete, contradictory, or open to multiple interpretations, thereby creating confusion and uncertainty in organizational actions.

According to Bennett and Lemoine (2014), VUCA environments are characterized by unstable conditions that require organizations to adopt flexible leadership approaches, adaptive strategies, and innovative problem-solving mechanisms to remain competitive and sustainable. They argued that organizations operating within VUCA environments must develop strategic agility and resilience to effectively manage environmental turbulence and uncertainty. Similarly, Sinha and Sinha (2020) explained that VUCA environments demand proactive leadership, organizational learning, and rapid responsiveness because traditional management approaches are often inadequate for handling continuous change and disruption. In such environments, organizations are required to develop adaptive capabilities that enable them to respond quickly to emerging opportunities and threats.

Recent studies have further emphasized the growing relevance of VUCA in contemporary business operations. Johansen and Euchner (2024) observed that digital transformation, artificial intelligence, economic fluctuations, and global crises have intensified environmental uncertainty, making organizational adaptability and resilience essential for long-term survival and competitiveness. Furthermore, Syamsir, Saputra, and Mulia (2025) noted that organizations operating in VUCA conditions require agile leadership, strategic flexibility, and innovation-driven cultures to sustain performance and manage uncertainty effectively. Therefore, uncertain business environments (VUCA) can be understood as dynamic and unpredictable organizational contexts characterized by rapid change, instability, complexity, and ambiguity that require organizations to adopt adaptive leadership, flexible strategies, and resilient operational systems for survival and sustainability.

Strategic adaptability and organizational resilience in uncertain business environments (VUCA)?

Strategic adaptability is the capacity of an organization and its leaders to modify strategic priorities, organizational structures, operational processes, and business practices in response to evolving internal and external environmental conditions. Within business environments marked by volatility, uncertainty, complexity, and ambiguity (VUCA), this capability is essential for enhancing organizational resilience by enabling firms to respond proactively to emerging challenges, adjust to changing circumstances, and sustain performance over time. Organizations that possess adaptive strategic capabilities are better able to anticipate environmental changes, respond effectively to disruptions, and sustain operational continuity during periods of uncertainty. One major effect of strategic adaptability on organizational resilience is the enhancement of organizational responsiveness to environmental changes. In VUCA environments, organizations frequently encounter rapid technological advancements, economic fluctuations, changing customer demands, and competitive pressures. Strategic adaptability enables organizations to modify their operational and strategic approaches promptly in response to these changes, thereby reducing vulnerability to external shocks. According to Ducheck (2020), adaptive organizations are more capable of sensing environmental threats and opportunities and implementing timely responses that enhance resilience and long-term sustainability.

Strategic adaptability also promotes organizational flexibility, which is essential for resilience in uncertain environments. Flexible organizations can reconfigure resources, processes, and policymaking systems rapidly to mitigate concerns ahead and disruptions. This elasticity improves the organization's ability to recover from crises and maintain operational effectiveness. Teece (2021) emphasized that dynamic and adaptive capabilities allow organizations to continuously transform and align their strategies with changing environmental conditions, thereby strengthening organizational resilience. Furthermore, strategic adaptability encourages innovation and continuous learning within organizations. In VUCA environments, organizations that embrace adaptive strategies are more likely to develop innovative solutions to complex problems and improve their ability to survive environmental turbulence. Adaptive organizations create learning cultures that encourage experimentation, knowledge sharing, and creative problem-solving, which contribute significantly to resilience. According to Syamsir, Saputra, and Mulia (2025), organizations with adaptive leadership and flexible strategic systems demonstrate stronger resilience because they are capable of adjusting quickly to changing market conditions and operational uncertainties.

Another important effect of strategic adaptability is the improvement of crisis management and risk mitigation capabilities. Organizations operating in uncertain business environments face various risks such as economic crises, supply chain disruptions, cybersecurity threats, and global pandemics. Strategic adaptability enables organizations to develop contingency plans, diversify operational approaches, and implement proactive risk management strategies that minimize the impact of disruptions. Hillmann and Guenther (2021) noted that resilient organizations are distinguished by their ability to adapt strategically and recover effectively from unexpected crises and environmental shocks.

In addition, strategic adaptability enhances employee confidence, commitment, and collaboration during uncertain situations. Adaptive organizations often encourage participatory decision-making, open communication, and teamwork, which improve employees' readiness to cope with organizational changes. This collective adaptability strengthens organizational resilience by fostering unity, innovation, and shared responsibility in addressing environmental challenges. Therefore, strategic adaptability significantly influences organizational resilience in uncertain business environments by improving organizational responsiveness, flexibility, innovation, crisis management, and continuous learning capabilities. Organizations that develop adaptive strategic systems are better positioned to survive, recover, and sustain competitive performance amidst the complexities and uncertainties of VUCA environments

Decision-making flexibility and organizational resilience in uncertain business environments (VUCA)?

Decision-making flexibility refers to the ability of organizational leaders and managers to adjust decisions, strategies, and actions quickly and effectively in response to changing environmental conditions and emerging challenges. In volatile, uncertain, complex, and ambiguous (VUCA) business environments, decision-making flexibility is essential for organizational resilience because organizations are constantly confronted with unpredictable disruptions, rapid technological changes, economic instability, and evolving market demands. Flexible decision-making enables organizations to respond proactively to uncertainty, maintain operational continuity, and sustain long-term performance. One significant effect of decision-making flexibility on organizational resilience is the enhancement of organizational responsiveness to crises and environmental disruptions. Organizations operating in VUCA environments frequently encounter situations that require rapid and adaptive decision-making to minimize risks and maintain stability. Flexible decision-making allows leaders to evaluate changing circumstances quickly, revise organizational strategies, and implement appropriate responses without delays. According to Ducheck (2020), resilient organizations are characterized by

their ability to make adaptive and timely decisions that support effective crisis response and organizational recovery.

Decision-making flexibility also strengthens organizational adaptability and strategic agility. In uncertain business environments, rigid decision-making structures often hinder organizations from responding effectively to environmental changes. Flexible decision-making encourages decentralized authority, innovative thinking, and collaborative problem-solving, which improve organizational adaptability. Teece (2021) argued that organizations with flexible strategic decision-making processes are better positioned to identify opportunities, manage uncertainty, and sustain competitive advantage in rapidly changing environments. Furthermore, decision-making flexibility contributes to effective risk management and business continuity. Organizations that adopt flexible decision-making approaches can adjust operational plans, allocate resources efficiently, and develop contingency strategies to manage unexpected disruptions. This capability enhances organizational resilience by reducing vulnerability to crises such as economic downturns, supply chain interruptions, technological disruptions, and global emergencies. Hillmann and Guenther (2021) emphasized that resilient organizations possess adaptive management systems that allow them to respond effectively to environmental uncertainty and operational challenges.

Another important effect of decision-making flexibility is the promotion of innovation and organizational learning. Flexible decision-making creates an environment where employees are encouraged to share ideas, experiment with new solutions, and participate in problem-solving processes. Such collaborative and adaptive practices improve organizational learning and innovation, which are essential for resilience in VUCA environments. According to Syamsir, Saputra, and Mulia (2025), agile and flexible leadership decision-making enhances organizational resilience by promoting responsiveness, innovation, and continuous adaptation to environmental changes.

Additionally, decision-making flexibility improves employee confidence and organizational cohesion during periods of uncertainty. When leaders make responsive and inclusive decisions, employees are more likely to trust management and remain committed to organizational goals despite environmental turbulence. This collective commitment strengthens the organization's ability to withstand and recover from crises effectively. Therefore, decision-making flexibility has a significant positive effect on organizational resilience in uncertain business environments (VUCA). It enhances organizational responsiveness, adaptability, innovation, crisis management, and business continuity, thereby enabling organizations to survive and thrive amidst environmental uncertainty and complexity.

Conceptual framework

Independent Variable

Fear-Based Motivation

Strategic Adaptability

Decision-Making Flexibility

Dependent Variable

Employee Commitment

Organizational Resilience

Source: Author's conceptualization (2026)

Theoretical Review

Dynamic Capabilities Theory

The study on Leadership Agility and Organizational Resilience in Uncertain Business Environments (VUCA) is anchored on the Dynamic Capabilities Theory (DCT). The theory was developed by David Teece, Gary Pisano, and Amy Shuen in 1997 as an extension of the Resource-Based View (RBV) of the firm. Dynamic Capabilities Theory emerged from the need to explain how organizations sustain competitive advantage in rapidly changing and unpredictable business environments. The theory emphasizes that organizations must continuously integrate, build, and reconfigure internal and external competencies to respond effectively to environmental changes and uncertainties (Teece, Pisano, & Shuen, 1997). Dynamic capabilities refer to the organization's ability to sense opportunities and threats, seize opportunities through strategic actions, and transform organizational structures and resources to maintain competitiveness and survival in turbulent environments. The theory argues that organizational success in dynamic business conditions depends not only on possessing valuable resources but also on the ability to adapt and renew those resources continuously. According to Teece (2021), dynamic capabilities enable organizations to respond effectively to uncertainty, technological changes, market disruptions, and competitive pressures through strategic agility and adaptive decision-making.

The theory is highly relevant in modern VUCA environments where organizations face volatility, uncertainty, complexity, and ambiguity. Dynamic Capabilities Theory emphasizes flexibility, innovation, learning, strategic responsiveness, and adaptability, all of which are necessary for organizational resilience and survival in uncertain business conditions. Recent studies have further

supported the theory by emphasizing that adaptive leadership and agile strategic capabilities are critical for organizational sustainability in rapidly changing environments (Schilke, Hu, & Helfat, 2023).

Dynamic Capabilities Theory is relevant to the study because it explains how leadership agility enhances organizational resilience in uncertain business environments. Leadership agility involves leaders' ability to adapt quickly, make flexible decisions, and respond strategically to changing environmental conditions. The theory supports the view that agile leaders help organizations develop adaptive capabilities that strengthen resilience and improve organizational survival during crises and disruptions.

The theory is particularly relevant to the variable of strategic adaptability, as it emphasizes the ability of organizations and leaders to reconfigure strategies, processes, and resources in response to environmental turbulence. In VUCA environments, organizations with strong dynamic capabilities can sense environmental changes, seize emerging opportunities, and transform operations effectively, thereby improving resilience and sustainability (Teece, 2021).

Dynamic Capabilities Theory also supports the variable of decision-making flexibility because flexible decision-making enables organizations to respond rapidly to uncertainties and operational disruptions. Agile and adaptive leaders make timely and innovative decisions that help organizations recover from crises and maintain operational continuity. This aligns with the theory's argument that organizations must continuously adjust their capabilities and strategic actions to remain competitive and resilient in uncertain business environments.

Furthermore, the theory explains organizational resilience as a dynamic organizational capability that enables firms to anticipate, adapt to, and recover from environmental disruptions. Resilient organizations are capable of learning from crises, reconfiguring resources, and implementing innovative solutions to sustain long-term performance. According to Ducheck (2020), organizational resilience is closely linked to adaptive capabilities, strategic flexibility, and continuous learning, which are core assumptions of Dynamic Capabilities Theory.

Therefore, Dynamic Capabilities Theory provides a strong theoretical foundation for understanding the relationship between leadership agility and organizational resilience in VUCA environments. The theory demonstrates how strategic adaptability and decision-making flexibility contribute to organizational resilience, sustainability, and competitive advantage amidst environmental uncertainty and complexity.

Empirical Review

Syamsir, Saputra, and Mulia (2025) conducted a systematic review on leadership agility in VUCA environments with emphasis on organizational adaptability and resilience. The study examined existing literature on agile leadership practices and their influence on organizational sustainability in uncertain business conditions. Using a qualitative systematic review approach, the researchers analyzed scholarly articles related to leadership agility, strategic responsiveness, and organizational resilience. The findings revealed that leadership agility significantly enhances organizational resilience by promoting strategic adaptability, innovation, rapid decision-making, and continuous learning. The study further showed that organizations with agile leaders are better positioned to respond effectively to environmental disruptions and maintain operational continuity during crises. The researchers concluded that leadership agility is a critical organizational capability for surviving and sustaining performance in volatile and uncertain business environments. The study supports the present research because it establishes a direct relationship between leadership agility and organizational resilience in VUCA conditions.

Similarly, Jansen, Chengie, El-Jbouly, Akaro, and Johne (2025) investigated agile leadership and organizational resilience during periods of crisis and uncertainty. The study adopted a conceptual and empirical framework to examine how agile leadership behaviors influence resilience among organizations facing environmental turbulence. Data were collected from managers and organizational leaders across various sectors using survey instruments and qualitative interviews. The findings indicated that agile leadership practices such as flexible decision-making, adaptive communication, strategic responsiveness, and collaborative problem-solving positively influence organizational resilience. The study also found that organizations led by agile leaders demonstrated stronger crisis management capabilities, improved employee adaptability, and enhanced business continuity during uncertain conditions. The researchers concluded that leadership agility is essential for strengthening organizational resilience and sustaining competitive advantage in rapidly changing environments. The study is relevant to the current research because it provides empirical evidence that leadership agility contributes significantly to resilience in uncertain business environments.

3. Methodology

Research Design

This study adopted a descriptive survey research design. The descriptive survey design was considered appropriate because it enables the researcher to collect quantitative data from respondents regarding the effect of leadership agility on organizational resilience in uncertain business environments characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). The design also facilitates the examination of relationships between variables without manipulating the

study environment. According to Creswell and Saunders, survey research design is suitable for studies involving attitudes, perceptions, and organizational behavioural variables. The study specifically examined how strategic adaptability and decision-making flexibility influence organizational resilience among selected commercial banks in Delta State, Nigeria. The design was therefore suitable because it allowed the researcher to obtain firsthand information from employees and managers within the banking sector.

Study Area

The study was conducted in Delta State, Nigeria. Delta State is located in the South-South geopolitical zone of Nigeria and is one of the major commercial and economic hubs in the Niger Delta region. The state hosts several branches of commercial banks operating within urban and semi-urban areas such as Asaba, Warri, Sapele, Ughelli, Agbor, and Effurun. The banking sector in Delta State operates in a highly dynamic business environment characterized by technological disruptions, economic fluctuations, regulatory uncertainties, and intense competition. These conditions make the state an appropriate area for examining leadership agility and organizational resilience in VUCA environments.

Study Population

The population of the study comprised employees of selected commercial banks in Delta State. The selected banks included:

1. First Bank of Nigeria
2. United Bank for Africa
3. Zenith Bank
4. Access Bank
5. Guaranty Trust Bank

The target respondents included branch managers, operations managers, supervisors, and other staff members who possess adequate knowledge of organizational leadership practices and resilience strategies.

Table 3.1: Population Distribution of Selected Commercial Banks in Delta State

S/N	Selected Commercial Banks	Estimated Staff Population
1	First Bank of Nigeria	145
2	United Bank for Africa	120
3	Zenith Bank	110
4	Access Bank	135

5	Guaranty Trust Bank	90
	Total	600

Source: Field Survey, 2026.

Therefore, the total population for the study was 600 staff members.

Sample Size Determination

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = Sample size
- N = Population size
- e = Level of significance (0.05)

n= 600

$$1 + 600(0.05)^2$$

$$n = 240$$

Thus, the sample size for the study was 240 respondents.

Table 3.2: Sample Distribution

S/N	Commercial Banks	Population	Sample Size
1	First Bank of Nigeria	145	58
2	United Bank for Africa	120	48
3	Zenith Bank	110	44
4	Access Bank	135	54
5	Guaranty Trust Bank	90	36
	Total	600	240

Source: Researcher's compilation (2026).

Sampling Technique

The study adopted a stratified and simple random sampling technique. Stratified sampling was used to categorize respondents according to their banks to ensure adequate representation from each institution. Thereafter, simple random sampling was employed to select respondents from each stratum. The use of these techniques minimized sampling bias and enhanced the representativeness of the study sample.

Sources of Data Collection

The study utilized both primary and secondary sources of data.

Primary data were obtained directly from respondents through the administration of structured questionnaires to employees of selected commercial banks in Delta State. Secondary data were sourced from textbooks, journal articles, conference papers, dissertations, internet materials, and related scholarly publications on leadership agility, organizational resilience, and VUCA environments.

Method of Data Collection

The researcher employed the survey method of data collection. Copies of the questionnaire were distributed personally to respondents across the selected commercial banks. This method enabled the researcher to gather reliable and relevant data directly from participants. The respondents were given sufficient time to complete the questionnaire to ensure accuracy and completeness of responses.

Instruments of Data Collection

The major instrument used for data collection was a structured questionnaire designed by the researcher. The questionnaire was divided into two sections:

- **Section A:** Demographic characteristics of respondents.
- **Section B:** Questions relating to the study variables.

The questionnaire items were structured using a five-point Likert Scale as follows:

Scale	Description
5	Strongly Agree (SA)
4	Agree (A)
3	Undecided (U)
2	Disagree (D)
1	Strongly Disagree (SD)

The questionnaire measured:

- Strategic adaptability
- Decision-making flexibility
- Organizational resilience

Validity of Instruments

Instrument validity refers to the degree to which a measurement tool accurately captures the concept or variable it is designed to assess. To establish the validity of the questionnaire used in this study, both face validity and content validity procedures were undertaken. The draft instrument was submitted to experts in Business Administration and Measurement and Evaluation for critical review. Their evaluation focused on the appropriateness, clarity, comprehensiveness, and relevance of the

questionnaire items to the study objectives. Based on their feedback and recommendations, the necessary revisions were made before the instrument was finalized for data collection. This validation process improved the overall quality of the instrument and increased confidence in the accuracy and credibility of the findings. As emphasized by **Nunnally**, a valid research instrument is fundamental to obtaining dependable and meaningful research results.

Reliability of Instruments

Reliability refers to the consistency and stability of the research instrument over time. The reliability of the questionnaire was determined using the Cronbach Alpha reliability method through a pilot study involving 20 respondents outside the study area.

Table 3.3: Reliability Statistics

Variables	Number of Items	Cronbach Alpha
Strategic Adaptability	6	0.82
Decision-Making Flexibility	6	0.79
Organizational Resilience	6	0.85
Overall Reliability	18	0.82

Source: researcher's compilation (2026)

The reliability coefficients exceeded the acceptable benchmark of 0.70 recommended by George Mallery, indicating that the instrument was reliable for the study.

Method of Data Analysis

Data collected from the field were analyzed using descriptive and inferential statistical tools. Descriptive statistics such as frequency tables, percentages, mean scores, and standard deviation were used to analyze demographic data and research questions. Inferential statistics involving multiple regression analysis were employed to test the hypotheses and determine the effect of leadership agility dimensions on organizational resilience. The Statistical Package for Social Sciences (SPSS) version 27 was used for data analysis.

Decision Rule:

- Mean score of 3.00 and above was accepted.
- Mean score below 3.00 was rejected.

Model Specification

The model for the study was specified as follows:

$$OR=f(SA, DMF)$$

Where:

- OR = Organizational Resilience
- SA = Strategic Adaptability
- DMF= Decision-Making Flexibility

The regression equation is expressed as:

$$OR = \beta_0 + \beta_1 SA + \beta_2 DMF + \mu$$

Where:

- β_0 = Constant term
- $\beta_1 - \beta_2$ = Regression coefficients
- μ = Error term

The a priori expectation is stated as:

$$\beta_1 > 0, \beta_2 > 0 \quad \beta_1 > 0,$$

This implies that strategic adaptability and decision-making flexibility are expected to positively influence organizational resilience in uncertain business environments.

4. Results and Discussion

This section presents the analysis and interpretation of data collected for the study titled Leadership Agility and Organizational Resilience in Uncertain Business Environments (VUCA). The analyses were carried out based on the objectives and hypotheses of the study. The chapter covers demographic analysis of respondents, preliminary analysis, descriptive statistics, correlation analysis, regression analysis, hypothesis testing, and discussion of findings. A total of 260 questionnaires were distributed to employees of selected commercial banks in Delta State. Out of the 260 questionnaires distributed, 240 were returned, while 20 were invalidated due to incomplete responses and inconsistencies. Consequently, 220 valid questionnaires were used for the analysis.

Questionnaire Distribution and Response Rate

Table 4.1: Questionnaire Distribution and Response Rate

Questionnaire Status	Frequency	Percentage (%)
Questionnaires Distributed	260	100
Questionnaires Returned	240	92.3
Invalidated Questionnaires	20	7.7
Valid Questionnaires Used	220	84.6

Source: Field Survey, 2026.

The table above indicates that 260 questionnaires were administered to respondents. Out of this number, 240 questionnaires were retrieved representing 92.3% return rate, while 20 questionnaires representing 7.7% were invalidated due to incomplete information. Therefore, 220 valid questionnaires were used for the final analysis.

Demographic Analyses of Respondents

Demographic Characteristics of Respondents

Table 4.2 Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	124	56.4
Female	96	43.6
Total	220	100

Source: researcher's compilation (2026)

The result indicates that 56.4% of the respondents were male while 43.6% were female, implying that both genders were adequately represented in the study.

Table 4.3: Age Distribution of Respondents

Age Bracket	Frequency	Percentage (%)
21–30 years	52	23.6
31–40 years	98	44.5
41–50 years	48	21.8
51 years and above	22	10
Total	220	100

Source: Field Survey, 2026.

The table reveals that respondents within the age bracket of 31–40 years constituted the majority with 44.5%, indicating that most respondents were within active managerial and operational age categories.

Table 4.4: Educational Qualification of Respondents

Qualification	Frequency	Percentage (%)
OND/NCE	28	12.7
HND/B.Sc.	126	57.3
Master's Degree	52	23.6
Ph.D.	14	6.4
Total	220	100

Source: Field Survey, 2026.

The analysis shows that the majority of respondents possessed HND/B.Sc. qualifications, representing 57.3%, suggesting that respondents were sufficiently educated to provide reliable information.

Years of Work Experience

Table 4.5: Years of Experience Frequency Percentage (%)

Years	Number	Percentage %
1–5 years	46	20.9
6–10 years	88	40
11–15 years	54	24.5
Above 15 years	32	14.5
Total	220	100

Source: Field Survey, 2026.

The table indicates that respondents with 6–10 years of work experience constituted the majority with 40.0%, implying that most respondents possessed adequate organizational experience.

4.5 Pattern of Data Presentation for Research Questions and Hypotheses

Research Question One

What is the effect of strategic adaptability on organizational resilience in uncertain business environments (VUCA)?

Table 4.6: Descriptive Statistics for Strategic Adaptability

Items	Mean	Std. Dev.
Management quickly adapts to environmental changes	4.18	0.72
Employees are encouraged to innovate during uncertainty	4.05	0.81
The organization adjusts strategies proactively	4.11	0.75
Leadership responds effectively to crises	4.2	0.69
Organizational structures support adaptability	3.98	0.84
Grand Mean	4.1	0.76

Source: Field Survey, 2026.

The grand mean score of 4.10 indicates strong agreement among respondents that strategic adaptability positively influences organizational resilience in VUCA environments.

Research Question Two

What is the effect of decision-making flexibility on organizational resilience in uncertain business environments (VUCA)?

Table 4.7: Descriptive Statistics for Decision-Making Flexibility

Items	Mean	Std. Dev.
Managers make quick decisions during	4.14	0.73

uncertainty		
Employees participate in decision-making	3.96	0.88
Decision processes are flexible and adaptive	4.08	0.77
Leadership encourages decentralized decisions	3.89	0.82
The organization responds rapidly to emerging issues	4.17	0.71
Grand Mean	4.05	0.78

Source: Field Survey, 2026.

The result shows a grand mean of 4.05, indicating that decision-making flexibility significantly contributes to organizational resilience in uncertain business conditions.

Descriptive Statistics

Table 4.8: Descriptive Statistics of Study Variables

Variables	Mean	Std. Dev.
Strategic Adaptability	4.1	0.76
Decision-Making Flexibility	4.05	0.78
Organizational Resilience	4.16	0.7

Source: Researcher's Computation, 2026.

The table reveals high mean values across all variables, indicating positive perceptions regarding leadership agility and organizational resilience among respondents.

Correlation Analysis

Pearson Correlation Matrix

Table 4.9: Pearson Correlation Matrix

Variables	Strategic Adaptability	Decision-Making Flexibility	Organizational Resilience
Strategic Adaptability	1		
Decision-Making Flexibility	0.642**	1	
Organizational Resilience	0.711**	0.684**	1

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

Source: Researcher's Computation, 2026.

The correlation analysis reveals a strong positive relationship between strategic adaptability and organizational resilience ($r = 0.711$, $p < 0.01$). Similarly, decision-making flexibility showed a strong positive relationship with organizational resilience ($r = 0.684$, $p < 0.01$).

Regression Analysis

Model Summary

Table 4.10 Model Summary

R	R Square	Adjusted R Square	Std. Error
0.768	0.59	0.584	0.432

Source: Researcher's Computation, 2026.

The result indicates that leadership agility dimensions jointly explained 59.0% variation in organizational resilience.

ANOVA Result

Table 4.11: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	58.216	2	29.108	156.84	0
Residual	40.264	217	0.186		
Total	98.48	219			

Source: Researcher's Computation, 2026.

The ANOVA result shows that the regression model is statistically significant ($F = 156.842$, $p < 0.05$), indicating that leadership agility significantly predicts organizational resilience.

Coefficients Table

Table 4.12: Regression Coefficients

Variables	Beta	t-value	Sig.
Constant	1.214	5.118	0
Strategic Adaptability	0.482	8.936	0
Decision-Making Flexibility	0.397	7.824	0

Dependent Variable: Organizational Resilience

Source: Researcher's Computation, 2026.

The regression result indicates that strategic adaptability has a significant positive effect on organizational resilience ($\beta = 0.482$, $p < 0.05$). Similarly, decision-making flexibility significantly affects organizational resilience ($\beta = 0.397$, $p < 0.05$).

4.9 Test of Hypotheses

Hypothesis One

H₀₁: Strategic adaptability has no significant effect on organizational resilience in uncertain business environments (VUCA).

The regression result in Table 4.13 revealed that strategic adaptability significantly affects organizational resilience ($\beta = 0.482$, $t = 8.936$, $p = 0.000$). Since the p-value is less than 0.05, the null hypothesis was rejected. Therefore, strategic adaptability has a significant positive effect on organizational resilience in uncertain business environments.

Hypothesis Two

H₀₂: Decision-making flexibility has no significant effect on organizational resilience in uncertain business environments (VUCA).

The regression results indicated that decision-making flexibility has a statistically significant positive effect on organizational resilience ($\beta = 0.397$, $t = 7.824$, $p = 0.000$). Given that the probability value is lower than the 0.05 level of significance, the null hypothesis was not supported and was therefore rejected. This finding confirms that decision-making flexibility is a significant predictor of organizational resilience in business environments characterized by uncertainty.

Discussion of Findings

Strategic adaptability on organizational resilience in uncertain business environments (VUCA)

The results of the study demonstrated that leadership agility plays a significant role in strengthening organizational resilience within business environments characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). Specifically, the study found that strategic adaptability positively influences organizational resilience. This implies that organizations capable of adjusting strategies proactively, responding rapidly to environmental changes, and encouraging innovation are more likely to survive and remain competitive during crises and disruptions.

The result aligns with the Dynamic Capabilities Theory, which emphasizes that organizations must continuously adapt, integrate, and reconfigure internal and external competencies to address rapidly changing environments (Teece, Pisano, & Shuen, 1997). The finding also agrees with the empirical study of Joiner and Josephs (2007), who argued that agile leadership enhances organizational responsiveness and resilience in turbulent business conditions.

Decision-making flexibility on organizational resilience in uncertain business environments (VUCA)

Furthermore, the study revealed that decision-making flexibility significantly affects organizational resilience. Flexible decision-making enables organizations to respond quickly to unexpected changes, reduce bureaucratic delays, and improve crisis management capabilities. Organizations with decentralized and adaptive decision-making structures tend to recover faster from disturbances and uphold working stability.

This finding supports the work of Doz and Kosonen (2010), who maintained that strategic agility and flexible decision processes improve organizational survival and adaptability in uncertain environments. The result also corroborates the findings of Lengnick-Hall, Beck, and Lengnick-Hall (2011), who asserted that flexible leadership systems contribute significantly to organizational resilience and long-term sustainability.

Overall, the study demonstrates that leadership agility dimensions, particularly strategic adaptability and decision-making flexibility, are serious elements of resilience in organizations within the VUCA environments.

Conclusions

This study investigated the association between leadership agility and organizational resilience within VUCA (volatile, uncertain, complex, and ambiguous) business environments, using selected commercial banks in Delta State, Nigeria, as the empirical context. The findings revealed that strategic adaptability and decision-making flexibility significantly enhance organizational resilience. Organizations that proactively adjust strategies, encourage innovation, and adopt flexible decision-making processes are better equipped to retort to ecofriendly changes, manage crises, and withstand long-term performance. The study further established that leadership agility is essential for improving organizational adaptability, competitiveness, and survival in volatile and uncertain business environments.

Recommendations

- i. Organizations should strengthen strategic adaptability by continuously reviewing strategies to align with adjusting in dynamic business environments. This will improve organizational resilience, innovation, and the ability to respond effectively to uncertainty and crises.
- ii. Management should encourage flexible and participatory decision-making systems that promote quick responses to emerging challenges. Decentralized decision-making and leadership agility training should also be adopted to enhance organizational adaptability and resilience in VUCA environments

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The author(s) declare that it is not applicable.

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The author(s) declare that they have no competing interests.

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