

Moderating the Role Environmental Turbulence between Strategic Management Practices and the Performance of Bank of Industry, (BOI) Nigeria

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HOW TO CITE:

Shalom Okpunyi Idikwu, Taiwo
Adewale Muritala, Oluwaseun
Michael-Omobhude, Oka Ene Abah
(2026).
Moderating the Role Environmental
Turbulence between Strategic
Management Practices and the
Performance of Bank of Industry,
(BOI) Nigeria.
International Journal of Special
Education, 41(24s), 1040-1061

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ABSTRACT:

This study investigates the moderating effect of environmental turbulence on the relationship between strategic management practices specifically strategic planning and innovation strategy and the performance, measured via innovation output, of the Bank of Industry (BOI) in Nigeria. Grounded in Dynamic Capabilities and Contingency theories, the research adopted a post-positivist philosophy and a quantitative, cross-sectional design. A complete census survey yielded 450 valid responses from professional staff across key operational departments. Using hierarchical multiple regression and Partial Least Squares Structural Equation Modeling (PLS-SEM), the findings reveal that while individual direct effects of strategic planning and innovation strategy on innovation output are non-significant, environmental turbulence exerts a significant positive moderating effect. This demonstrates that strategic management tools become profoundly more consequential under high-volatility conditions. Consequently, the study concludes that formal strategies require adaptive execution and recommends that BOI institutionalize agile, turbulence-responsive strategic frameworks to enhance its developmental and innovation performance amid macroeconomic uncertainty. Based on this finding, the study recommends that BOI management institutionalize agile, rolling strategic frameworks and enhance internal absorptive capacities to dynamically respond to macroeconomic uncertainty and drive sustainable developmental innovation.

Keywords: Environmental Turbulence, Strategic Management Practices, Strategic Planning, Innovation Strategy, Bank of Industry (BOI).

1. Introduction

The Nigerian financial sector operates within a volatile macroeconomic landscape defined by currency fluctuations, inflationary pressures, and

regulatory shifts, which together epitomize environmental turbulence (Obi et al., 2023). Within this environment, Development Finance Institutions (DFIs) like the Bank of Industry

(BOI) are vital for driving industrialization and economic growth (Adetiloye et al., 2022). However, institutional efficacy is constantly tested by this very turbulence. Consequently, performance cannot be evaluated solely through conventional financial metrics, but must instead focus on innovation output reflecting how effectively the institution develops novel financial products, digital platforms, and processes to meet market needs (Eze & Okoye, 2024).

Environmental turbulence is multi-dimensional, comprising market, technological, and regulatory shifts (Okonkwo & Iyiola, 2022). To navigate these conditions, DFIs rely on Strategic Management Practices (SMP), specifically strategic planning and innovation strategy. While structured strategic planning works well in stable settings, it can induce organizational rigidity under intense turbulence. To counter this, an innovation strategy becomes essential. The link between innovation strategy and innovation output is heavily catalyzed by technological and market turbulence, which create both the necessity and tools for institutional change (Adeola et al., 2023). Turbulence thus acts as an active conditioning mechanism determining strategic success.

The central problem lies in the under-researched nexus between these SMPs and BOI performance within Nigeria's volatile context. While general literature asserts a positive linear strategy-performance relationship, specific pathways within a Nigerian DFI remain opaque. Persistent challenges, such as widening financing gaps for small businesses and portfolio asset quality struggles, point to a disconnect between strategic intentions and performance outcomes (Adetiloye et al., 2022; SMEDAN, 2022). Furthermore, there is a distinct scarcity of empirical research examining combined SMP effects in sub-Saharan African DFIs, as most studies focus on commercial banks where profit is the primary motive (Olayemi & Abdullateef, 2021).

Moreover, an unresolved theoretical tension exists regarding how to integrate strategic

planning and innovation strategy under turbulence. Strategic planning emphasizes structured foresight, whereas innovation strategy requires responsiveness to technological shifts, leaving managers with conflicting prescriptions on how to weight these practices (Akinbola et al., 2024). Additionally, environmental turbulence is often treated merely as a statistical control rather than a dynamic boundary condition that actively dictates the viability of long-term plans (Okonkwo & Iyiola, 2022). Finally, relying solely on macro-financial metrics fails to capture developmental nuances, making the evaluation of innovation output critical to preventing long-term relevance erosion (Eze & Okoye, 2024). From the problems discussed above, the following questions were raised: how does strategic planning affect innovation output in Bank of Industry in Nigeria? how does innovation strategy affect innovation output in Bank of Industry in Nigeria? what is the moderating role of environment turbulence between Strategic Management Practices and Organizational Performance in Bank of Industry in Nigeria?

Objectives of the Study

The main objective of the study is to evaluate the moderating role of environment turbulence between strategic management practices and organizational performance in Bank of Industry in Nigeria while the specific objectives are to:

- i. Examine the effect of strategic planning on innovation output in Bank of Industry in Nigeria.
- ii. Examine the effect of innovation strategy on innovation output in Bank of Industry in Nigeria.
- iii. Evaluate the moderating role of environment turbulence between Strategic Management Practices and Organizational Performance in Bank of Industry in Nigeria.

Research Hypotheses

Judging from the objectives stated above, the following hypotheses were formulated in null forms:

H₀₁: There is no significant effect between strategic planning and innovation output in Bank of Industry in Nigeria.

H₀₂: Innovation strategy does not have a significant effect on innovation output in Bank of Industry in Nigeria.

H₀₃: Environment turbulence do not have a significant moderating role between Strategic Management Practices and Organizational Performance in Bank of Industry in Nigeria.

2. Literature Review

Strategic Management Practices (SMPs) represent the integrated processes and analytical routines through which an organization formulates and implements decisions to secure long-term objectives (Alharthy et al., 2023; Ghasemzadeh et al., 2024). Rooted in theoretical frameworks such as the Resource-Based View (Barney, 2021) and the Dynamic Capabilities View (Teece et al., 2021), SMPs for a Development Finance Institution (DFI) like Nigeria's Bank of Industry (BOI) require reconciling institutional financial sustainability with broad socio-economic developmental mandates (Adetiloye et al., 2022). Within this study, SMPs are specifically operationalized through two core proxies: strategic planning and innovation strategy.

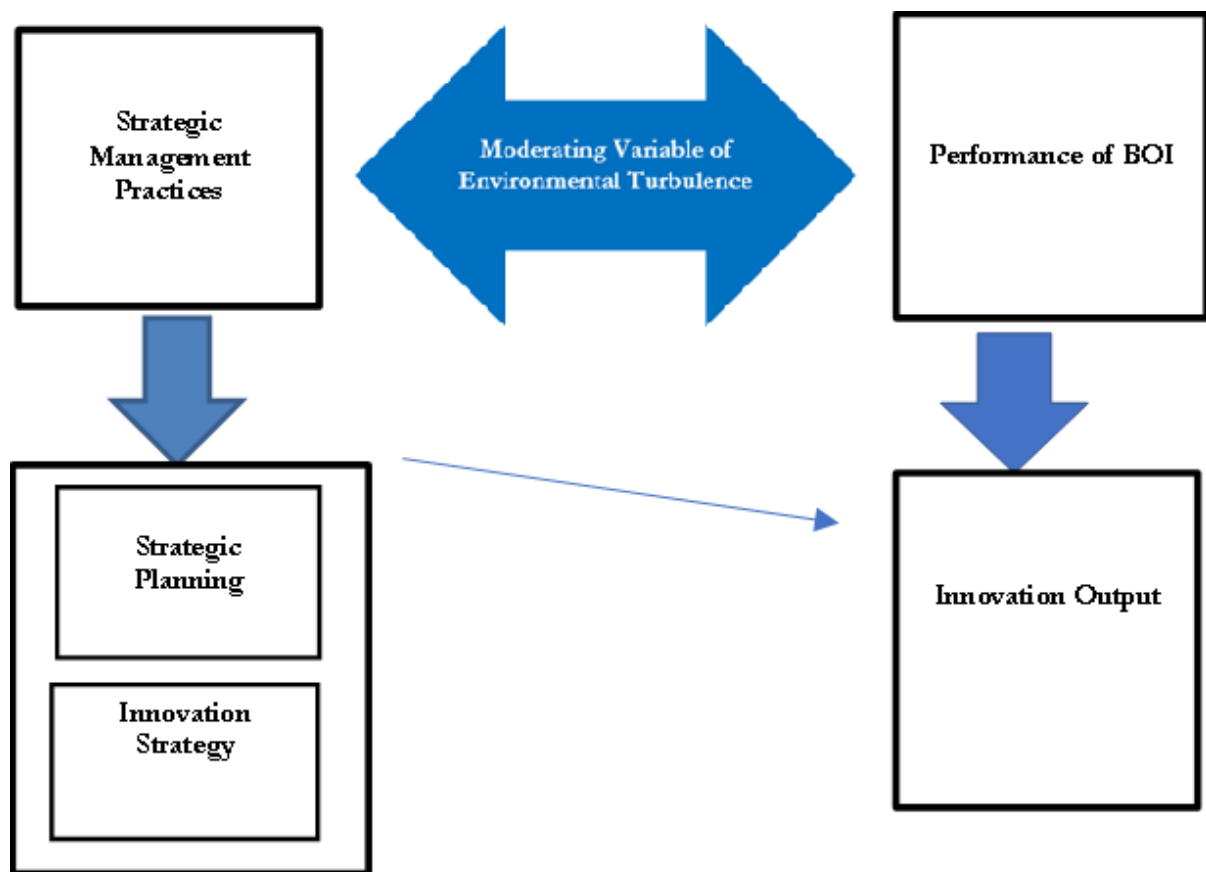
Strategic planning serves as the foundational architectural blueprint, representing the disciplined process of defining organizational direction and allocating resources (Ghasemzadeh et al., 2024; Wolf & Floyd, 2023). Modern strategic planning has evolved from rigid long-term models into an adaptive, learning-oriented framework involving continuous environmental sensing and strategy formulation (Bianchi et al., 2023). For the BOI, strategic planning functions as a hybrid mechanism that aligns corporate rigor with national development objectives, such as the Nigeria Agenda 2050, thereby balancing financial metrics with socio-economic impact indicators (Yusuf & Dansu, 2023).

Complementing this, innovation strategy systematically integrates innovation objectives

and resources into the core framework, transforming innovation from a sporadic activity into a managed competitive asset (Akinbola et al., 2024; Saunila, 2023). For the BOI, a robust innovation strategy addresses structural challenges like financial inclusion, digital credit assessment, and sustainable green financing. This strategy directly drives innovation output conceptualized as the tangible, measurable realization of new financial products, digital lending platforms, and improved institutional processes (Nwankwo & Eze, 2024; Saunila, 2023). Innovation output acts as the primary performance proxy, capturing the institution's capacity to deliver novel solutions that overcome industrialization bottlenecks.

Finally, environmental turbulence acts as a critical moderating variable that alters the strength and direction of the relationship between these SMP proxies and innovation output. Defined as the combined measure of external changeability and predictability (Oladipo et al., 2022), turbulence in Nigeria is marked by discontinuous instability (Ibrahim & Hassan, 2023). This environment encompasses technological disruptions from fintechs and AI-driven appraisals (Oyeniyi, 2024), market volatility from macroeconomic policy shifts (Chukwuma & Bello, 2022), and regulatory unpredictability driven by Central Bank of Nigeria directives (Okeke & Nnamdi, 2025). Consequently, environmental turbulence critically conditions how strategic planning and innovation strategy are executed to achieve optimal innovation performance.

The main concept, which is Performance of BOI proxy by innovation output as well as the exogenous variable – Strategic Management Practices proxy by Strategic Planning and Innovation Strategy and Environmental Turbulence as the moderating factor. The diagram of conceptual framework shows the unique relationship between the independent variables and the dependent variable as shown in figure 1:



The framework depicts Strategic Management Practices (SMP) as the independent variable, represented by two first-order constructs: Strategic Planning (SP), and Innovation Strategy (IS). These are modeled as formative indicators forming the higher-order SMP construct.

Performance of BOI (PBOI) is the dependent variable, represented by a first-order reflective construct: Innovation Output (IO). This forms the higher-order PBOI construct.

Environmental Turbulence (ET) is positioned as the moderating variable, influencing the strength of the path relationship between the higher-order SMP and higher-order PBOI constructs (indicated by an arrow intersecting the main SMP→PBOI path).

The framework posits that:

1. H₁-H₂: Each SMP proxy (SP, IS) has a direct, positive effect on PBOI proxy (IO).
2. H₃: Environmental Turbulence (ET) significantly moderates the relationship

between the composite SMP and composite PBOI.

This framework visually synthesizes the hypothesized relationships and guides the operationalization of variables and the statistical analysis.

Theoretical Framework

The theoretical foundation for examining the impact of strategic management practices on the performance of the Bank of Industry (BOI) in Nigeria requires an integrated synthesis of the Dynamic Capabilities View (DCV) and Contingency Theory. While supplementary frameworks like the Resource-Based View offer valuable insights, DCV and Contingency Theory serve as the core explanatory pillars. The dynamic capabilities view, as articulated by Teece et al. (2021), acts as the primary action theory by explaining how sustainable advantage in rapidly changing environments depends on a firm's ability to integrate, build, and reconfigure internal and external competencies. The volatile Nigerian financial and developmental landscape characterized by currency fluctuations, oil price

volatility, and fintech disruptions exemplifies this rapidly changing environment (Obi et al., 2023). Specifically, DCV's micro-foundations of sensing, seizing, and transforming map directly onto the study's core variables: sensing is operationalized through strategic planning, seizing through innovation strategy, and transforming through strategic agility (Akinbola et al., 2024).

Complementing DCV, Contingency Theory provides the critical conditional "if-then" logic required to evaluate these relationships under varying external pressures. Its core tenet that organizational effectiveness results from aligning strategy with environmental circumstances justifies the moderating role of environmental turbulence (Lawrence & Lorsch, 1967). Rather than assuming a universally optimal set of practices, Contingency Theory dictates that the effectiveness of strategic planning and innovation strategy is fundamentally shaped by market, technological, and regulatory turbulence (Bianchi et al., 2023). For instance, while structured strategic planning can drive innovation strategy in stable conditions, intense turbulence requires pivoting toward innovation strategy and agility to safeguard innovation output. Ultimately, this integrated framework demonstrates that the BOI's performance outcomes depend on how effectively its dynamic capabilities are deployed to match the realities of its multi-dimensional, turbulent operating environment.

Empirical Review

The empirical literature examining the intersection of strategic management practices and the performance of BOI provides a foundational lens for understanding how institutions navigate complex economic environments. Within this study's framework, strategic management practices are operationalized specifically through strategic planning and innovation strategy, while performance is measured exclusively through innovation output. Scholarly inquiries consistently highlight that the formulation and execution of these strategic components are

deeply intertwined with contextual factors, institutional dynamics, and external environmental pressures. By evaluating past empirical contributions, researchers can discern how structured planning mechanisms and deliberate innovation initiatives translate into tangible developmental and operational outcomes for institutions like the Bank of Industry.

Strategic planning serves as the formal architectural backbone for aligning organizational resources with long-term goals, directly influencing an institution's capacity to generate innovation outputs. Knight, Paroutis, and Heracleous (2023) utilized a longitudinal mixed-methods design across European corporations to investigate how strategic planning sophistication and adaptability influence resilience and recovery during periods of extreme turbulence. Their findings established a strong positive correlation between planning sophistication and organizational performance, noting that adaptive planning components such as rolling forecasts and contingency structures are critical predictors of recovery in volatile markets.

Expanding on the behavioural dimensions of strategic planning, Aslam, Farid, and Iqbal (2024) investigated how top management team behavioural integration and middle management alignment moderate the planning-performance linkage within manufacturing firms. Their structural equation modeling revealed that while direct formal planning effects can be constrained by rigid structures, robust middle management alignment acts as a powerful conduit that channels strategic intent into measurable operational and innovative results. Similarly, Mackenzie (2024) demonstrated that agile planning methodologies characterized by quarterly reviews rather than static annual cycles yielded significantly higher product innovation output and cumulative growth, as reduced information latency allowed firms to capitalize on emerging market opportunities.

Conversely, the relationship between strategic planning intensity and performance is not

invariably linear. Benson and Tan (2024) identified a curvilinear, inverted U-shaped relationship among small and medium-sized enterprises, demonstrating that excessive administrative formalization or overly complex strategic matrices can induce bureaucratic overload and stifle entrepreneurial flexibility. Optimal innovation output requires a balanced planning threshold that provides clear directional guidance without suffocating operational agility. Furthermore, studies examining specialized sectors, such as Vecchiato (2022) and Delmond et al. (2021), emphasize that the efficacy of strategic planning is heavily contingent upon the degree of environmental uncertainty, with formal planning yielding maximal value when integrated with strategic foresight tools to navigate complex regulatory landscapes.

Innovation strategy functions as the deliberate catalyst for transforming organizational ideas into market-ready solutions, serving as the second core proxy for strategic management practices. Lee and Lee (2023) investigated the ambidexterity thesis through a longitudinal panel study of R&D-intensive firms, confirming that a balanced innovation strategy combining exploratory research and exploitative refinement significantly enhances technological output and organizational valuation, provided financial slack buffers are present. In parallel, Rocha, Kato, and de Vasconcelos (2024) demonstrated that ecosystem-centric innovation strategies focusing on open partnerships and platform collaborations accelerate the delivery of novel products and solutions, with internal absorptive capacity serving as a vital mediator for internalizing external knowledge streams.

The integration of sustainability into innovation frameworks has further expanded the scope of innovation output. Song and Yu (2022) conducted a comprehensive meta-analysis establishing a significant positive correlation between green innovation strategies and performance metrics, noting that regulatory pressures and market maturity serve as key moderators that amplify these outcomes. However, governance structures also dictate the success of innovation strategies; De Massis,

Frattoni, and Quillico (2023) revealed that family-owned firms experience attenuated innovation performance benefits from formal strategies due to emotional decision-making priorities. Consequently, maximizing innovation output requires aligning innovation strategies with institutional governance, absorptive capacity, and external market demands.

Literature Gaps

Based on the conceptual, theoretical, and empirical reviews established regarding strategic management practices (SMPs) specifically strategic planning and innovation strategy and their impact on innovation output within the context of development finance institutions like the Bank of Industry (BOI) in Nigeria, several critical gaps emerge in the literature:

Contextual Gap: DFI-Specific and Emerging Market Scarcity

While extensive empirical research evaluates SMPs and performance across traditional manufacturing, commercial banking, SME sectors, and advanced Western economies (e.g., Knight et al., 2023; Aslam et al., 2024; Lee & Lee, 2023), there is a distinct shortage of empirical inquiry tailored to Development Finance Institutions (DFIs). DFIs operate under a unique hybrid mandate balancing commercial financial viability with socio-economic developmental impact. Existing literature largely overlooks how formal strategic planning and innovation strategies drive *innovation output* within a state-backed DFI operating in an emerging economy characterized by severe macroeconomic volatility and infrastructural deficits.

Methodological and Operational Gap: Over-Reliance on Financial Proxies vs. Innovation Output

Much of the extant empirical literature measures organizational performance through conventional financial metrics (such as Return on Assets, Return on Equity, or general profitability) or broad market share indicators (Hosseini et al., 2023; Song & Yu, 2022). Consequently, there is a narrow understanding of how specific SMP dimensions directly translate into innovation

output, such as the creation of specialized digital lending platforms, green financing products, or novel credit appraisal methodologies tailored for unserved industrial sectors. Prior studies rarely isolate innovation output as a standalone, primary performance proxy in development banking.

Theoretical Integration Gap: The Mechanics of Environmental Turbulence as a Moderator

While Contingency Theory and the Dynamic Capabilities View (DCV) theoretically suggest that environmental turbulence conditions the relationship between SMPs and performance (Teece et al., 2021; Lawrence & Lorsch, 1967), empirical studies frequently treat turbulence as a broad background condition rather than modeling its precise moderating mechanics. Specifically, there is a lack of empirical clarity on *how* distinct dimensions of environmental turbulence in Nigeria (such as sudden regulatory shifts by the Central Bank of Nigeria, foreign exchange volatility, and technological disruption) moderate the specific pathways between strategic planning, innovation strategy, and institutional innovation output.

Behavioral and Micro-Foundational Gap in Public Institutions

Recent studies highlight the importance of behavioral micro-foundations, such as top management team integration and middle management alignment (Aslam et al., 2024). However, most of these insights are derived from private-sector multinational corporations or commercial enterprises where profit motives dominate. Literature exploring how bureaucratic structures, public sector governance, and internal managerial alignment interact with strategic planning and innovation strategy to affect innovation outputs in state-owned or policy-driven institutions remains critically underdeveloped.

3. Methodology

Research Philosophy and Approach

This study adopts a post-positivist research philosophy, aligning with a standardized,

empirical approach to social and organizational inquiry while acknowledging that objective reality is understood probabilistically due to human measurement limitations (Creswell & Creswell, 2018). Post-positivism rejects extreme subjectivism and metaphysics, relying instead on observable facts, verifiable data, and statistical analysis to yield dependable knowledge. The researcher remains independent of the subjects to ensure objective outcomes. Grounded theoretically in the Dynamic Capabilities View (DCV) and Contingency Theory, the study uses a deductive research approach, moving from established theory to the testing of specific hypotheses regarding strategic management practices, environmental turbulence, and institutional performance.

Research Design

A quantitative, cross-sectional, and survey-based research design is employed. This design is optimal for examining the relationships among multiple variables at a single point in time (2024–2026), offering efficiency, statistical generalizability across a geographically dispersed professional population, and a practical framework for testing hypotheses (Saunders et al., 2019).

Population, Sample Size, and Sampling Technique

The target population comprises 450 professional employees across key departments within the Bank of Industry (BOI) in Nigeria, including Strategy & Planning, Corporate Banking, Risk Management, Operations, and Finance & Performance Management. Given the manageable scale of this target population, the study adopts a complete census survey (complete enumeration) rather than drawing a sample. Surveying all 450 members eliminates sampling error, maximizes statistical power for advanced modeling, and ensures comprehensive representation across the institution. For the supplementary qualitative phase, a purposive sampling technique is utilized to select 15 to 20 senior managers and unit heads with a minimum of two years of relevant tenure for in-depth interviews.

Instrumentation and Data Collection

Primary data is collected using a structured, self-administered online questionnaire hosted on secure platforms, supported by physical distribution where necessary. The instrument utilizes a five-point Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree) and is organized into four main sections:

- Section A: Demographic and organizational profile.
- Section B: Strategic Management Practices (SMP), measuring strategic planning and innovation strategy using adapted scales.
- Section C: Performance of the Bank of Industry (PBOI), evaluating innovation output in relative to industry standards.
- Section D: Environmental Turbulence (ET), assessing the perceived volatility of government policy and market conditions.

Reliability and Validity

To ensure the trustworthiness of the research instrument, rigorous diagnostic tests will be conducted:

- Reliability: Assessed via Cronbach's Alpha ($\alpha \geq 0.7$) and Composite Reliability ($CR \geq 0.7$) using data from a pilot study of 30 respondents from a comparable financial institution.
- Content Validity: Confirmed through an extensive literature review and evaluations by a panel of academic experts and two senior BOI managers.
- Construct Validity: Evaluated via Factor Analysis (Principal Component Analysis with Varimax rotation, Kaiser-Meyer-Olkin measure ≥ 0.6 , and Bartlett's test of sphericity $p < 0.05$). Convergent and discriminant validity will be confirmed using Average Variance Extracted ($AVE \geq 0.5$) and the Fornell-Larcker criterion.

- Common Method Bias: Proactively addressed through procedural separation of scale items and statistically evaluated using Harman's Single Factor test (ensuring total variance explained by a single factor remains below 50%).

Method of Data Analysis

Data was processed using the Statistical Package for Social Sciences (SPSS v.27) and Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 4 software.

- Descriptive Statistics: Frequencies, percentages, means, and standard deviations will summarize demographic profiles and variable perceptions.
- Inferential Statistics: Pearson correlation will establish preliminary relationships. Hierarchical Multiple Regression and PLS-SEM will be deployed simultaneously to evaluate measurement models, test direct path coefficients, and assess the moderating effects of environmental turbulence. Simple slope analysis will be utilized to plot and visualize interaction effects under conditions of high versus low turbulence.

Model Specification

To test the hypothesized moderating effect, the following hierarchical regression models was adopted from (Mizrak, 2024; Nuel et al., 2021). It is specified as:

Model 1 (Direct Effect):

$$\text{PERF} = \beta_0 + \beta_1(\text{SMP}) + \epsilon$$

.....(1)

Model 2 (Adding Moderator):

$$\text{PERF} = \beta_0 + \beta_1(\text{SMP}) + \beta_2(\text{ET}) + \epsilon$$

.....(2)

Model 3 (Interaction Effect - Moderation):

$$\text{PERF} = \beta_0 + \beta_1(\text{SMP}) + \beta_2(\text{ET}) + \beta_3(\text{SMP} * \text{ET}) + \epsilon$$

$$ET) + \epsilon \quad (3)$$

Where:

- **PERF** = Organizational Performance (Composite Index Score)
- β_0 = Constant (Intercept)
- **SMP** = Strategic Management Practices (Composite Score)
- **ET** = Environmental Turbulence (Composite Score)
- **SMP * ET** = Interaction term between Strategic Management Practices and Environmental Turbulence
- $\beta_1, \beta_2, \beta_3$ = Regression Coefficients
- ϵ = Error Term

The moderating role of Environmental Turbulence is supported if β_3 in Model 3 is statistically significant ($p < 0.05$). Furthermore, the change in the coefficient of determination (ΔR^2) from Model 2 to Model 3 will be assessed for significance using the F-test.

4. Results and Discussions

The primary aim of this research was to investigate the effect of strategic management practices on the performance of the Bank of Industry in Nigeria, with the moderating role of environmental turbulence. More specifically, the study sought to analyze the causal relationship between the various components of strategic management practices (strategic planning and innovation strategy,) and innovation output of this bank. The primary data utilized for this study encompassed the period from 2024 to 2026. In parallel, primary data was gathered from a sample of 450 management and senior staff from key departments: Strategy & Planning; Corporate Banking; Risk Management; Operations; Finance & Performance Management to fulfill all the objectives of the study. The response rate for the primary data collection is detailed in Table 4.1; out of approximately 460 employees contacted with the questionnaire, 450 responses were obtained, yielding a response rate of 97.8% of the total distributed questionnaires.

Table 1: Questionnaire Response Rate

Questionnaire Number	Number	Percentage (%)
Returned	450	97.8
Not Returned	10	2.2
Total Administered	460	100

Source: Researcher's Compilation, (2026)

Also, the response rate for the primary data collection is detailed in Table 4.2; showcasing the demographic and organizational characteristics of the respondents including their various figures.

Table 2 Demographic and Organizational Characteristics of Respondents (N = 450)

Variable / Category	n	%
Gender		
Female	202	44.9
Male	248	55.1
Age Bracket		
1040-1061	104	23.1

1040-1061	188	41.8
1040-1061	119	26.4
55 and above	39	8.7
Highest Educational Qualification		
HND/BA/BSc	116	25.8
MSc/MBA/MA	247	54.9
Other	26	5.8
PhD	61	13.6
Department/Unit		
Corporate Banking	120	26.7
Finance & Performance Management	70	15.6
Operations	110	24.4
Risk Management	80	17.8
Strategy & Planning	70	15.6
Job Level		
Junior Staff	89	19.8
Middle Management	179	39.8
Senior Management	140	31.1
Top Management	42	9.3
Years of Service		
Less than 5 years	93	20.7
1040-1061 years	155	34.4
1040-1061 years	120	26.7
Above 15 years	82	18.2

The demographic and organizational characteristics of the respondents show that the study achieved broad coverage across the Bank of Industry staff population captured in the methodology. Male respondents constituted 55.1% ($n = 248$) of the sample, while female respondents accounted for 44.9% ($n = 202$), indicating a fairly balanced gender distribution.

In terms of age, the largest proportion of respondents fell within the 1040-1061 years bracket (41.8%, $n = 188$), followed by 1040-1061 years (26.4%, $n = 119$) and 1040-1061 years (23.1%, $n = 104$). Respondents aged 55 years and above constituted the smallest proportion (8.7%, $n = 39$). This suggests that most of the respondents were within the active

professional and managerial age categories relevant to strategic management and organizational performance assessment.

With respect to educational qualification, the majority of respondents possessed MSc/MBA/MA qualifications (54.9%, $n = 247$), followed by HND/BA/BSc holders (25.8%, $n = 116$), PhD holders (13.6%, $n = 61$), and respondents with other qualifications (5.8%, $n = 26$). This indicates that the respondents were academically equipped to provide informed responses on issues relating to strategic planning, innovation strategy environmental turbulence and innovation output. In terms of departmental distribution, Corporate Banking had the highest proportion of respondents (26.7%, $n = 120$), followed by Operations (24.4%, $n = 110$), Risk Management (17.8%, $n = 80$), while Finance & Performance Management and Strategy & Planning each accounted for 15.6% ($n = 70$). This spread reflects adequate representation of the key BOI units identified in the study population.

The job level profile further shows that Middle Management had the highest representation (39.8%, $n = 179$), followed by Senior Management (31.1%, $n = 140$), Junior Staff (19.8%, $n = 89$), and Top Management (9.3%, $n = 42$). This implies that a substantial proportion of the respondents occupied positions directly involved in strategic execution, operational oversight, and managerial decision-making. Finally, the years of service distribution reveals that 34.4% ($n = 155$) had worked in BOI for 1040-1061 years, 26.7% ($n = 120$) for 1040-1061 years, 20.7% ($n = 93$) for less than 5 years, and 18.2% ($n = 82$) for above 15 years. Overall, this suggests that the respondents had sufficient institutional exposure and experience to provide credible data for examining the moderating role of environmental turbulence in the relationship between strategic management practices and the performance of the Bank of Industry in Nigeria.

The demographic and organizational profile of the respondents indicates that the study achieved broad coverage across the Bank of Industry staff population specified in the methodology. As shown in Table 4.1, male respondents constituted 55.1% ($n = 248$) of the sample, while female respondents accounted for 44.9% ($n = 202$), suggesting a fairly balanced gender composition. In terms of age distribution, the largest proportion of respondents fell within the 1040-1061 years category (41.8%, $n = 188$), followed by those aged 1040-1061 years (26.4%, $n = 119$) and 1040-1061 years (23.1%, $n = 104$). Respondents aged 55 years and above represented the smallest group (8.7%, $n = 39$). This implies that the majority of participants were within the active mid-career and senior-career age range, which is appropriate for assessing strategic management practices, environmental turbulence, and organizational performance within BOI.

Regarding educational qualification, more than half of the respondents held MSc/MBA/MA degrees (54.9%, $n = 247$), while 25.8% ($n = 116$) possessed HND/BA/BSc qualifications, 13.6% ($n = 61$) had PhD qualifications, and 5.8% ($n = 26$) reported other qualifications. This educational profile suggests that the respondents were sufficiently qualified to provide informed assessments on the study constructs, especially given the strategic and managerial orientation of the research. By department/unit, Corporate Banking had the highest representation (26.7%, $n = 120$), followed by Operations (24.4%, $n = 110$), Risk Management (17.8%, $n = 80$), while Finance & Performance Management and Strategy & Planning each contributed 15.6% ($n = 70$). This spread reflects the core functional areas identified in the study population and supports the institutional relevance of the responses.

In terms of job level, Middle Management constituted the largest group of respondents (39.8%, $n = 179$), followed by Senior Management (31.1%, $n = 140$), Junior Staff (19.8%, $n = 89$), and Top Management (9.3%, $n = 42$). This indicates that the study captured

substantial input from staff occupying positions directly involved in planning, execution, coordination, and performance oversight. Finally, the distribution of years of service shows that 34.4% ($n = 155$) had worked in BOI for 1040-1061 years, 26.7% ($n = 120$) for 1040-1061 years, 20.7% ($n = 93$) for less than 5 years,

and 18.2% ($n = 82$) for above 15 years. Collectively, these results suggest that the respondents possessed adequate institutional experience and organizational knowledge to provide credible data for examining the relationship between strategic management practices, environmental turbulence, and the performance of the Bank of Industry in Nigeria.

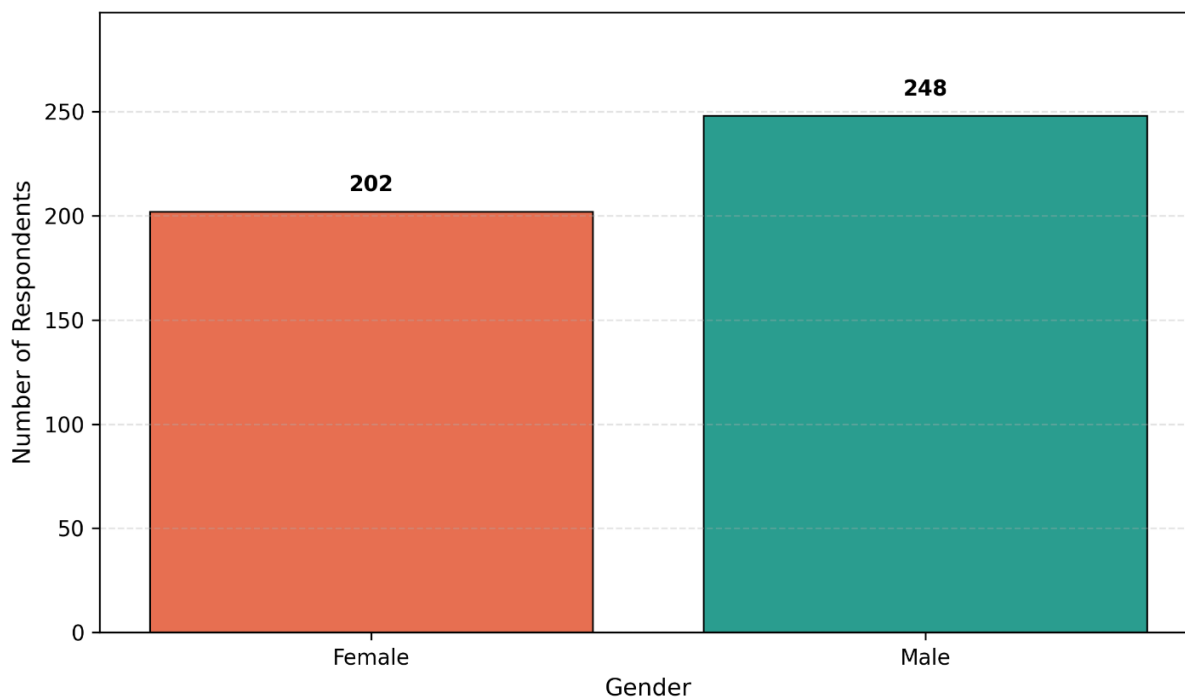


Figure 1 presents the distribution of respondents by gender.

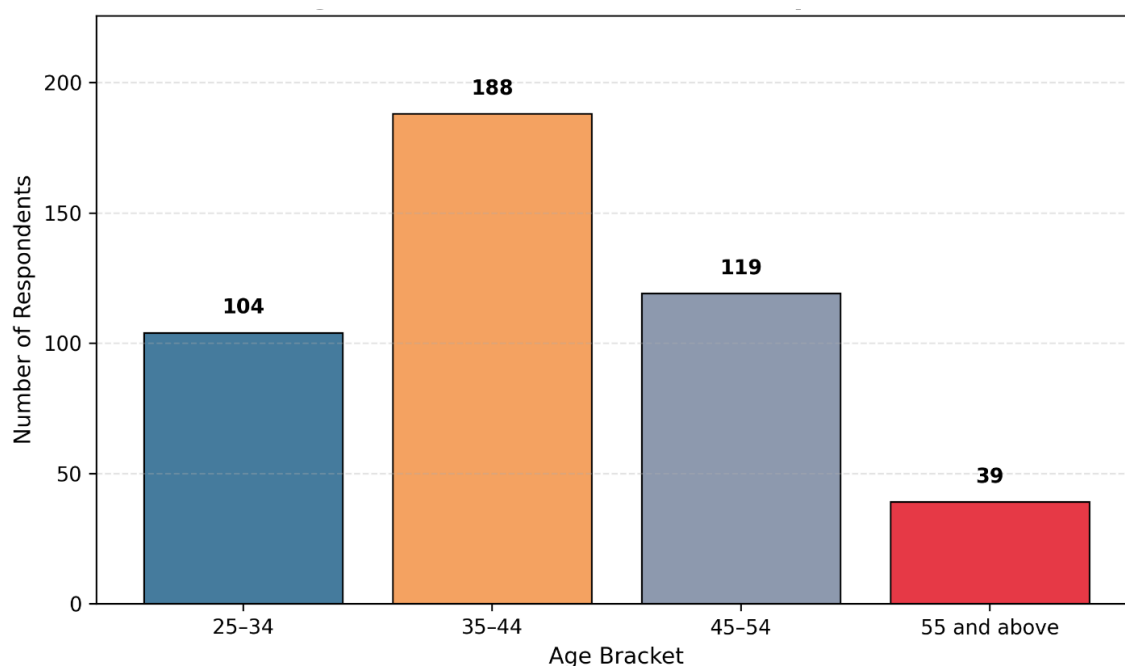


Figure 2 Age Bracket Distribution of Respondents

Figure 2 shows the age composition of the respondents across the four specified age categories.



Figure 3 Departmental Distribution of Respondents

Figure 3 illustrates the spread of respondents across the selected BOI departments included in the study.

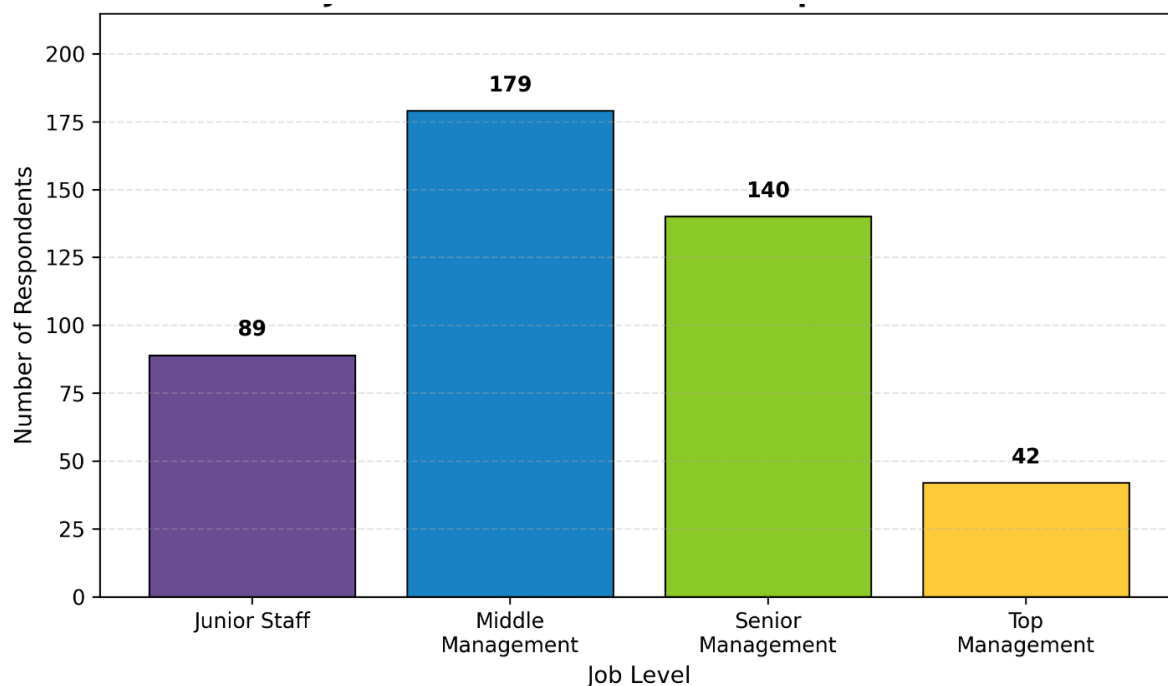


Figure 4 Job Level Distribution of Respondents

Figure 4 displays the respondents according to their organizational job levels.

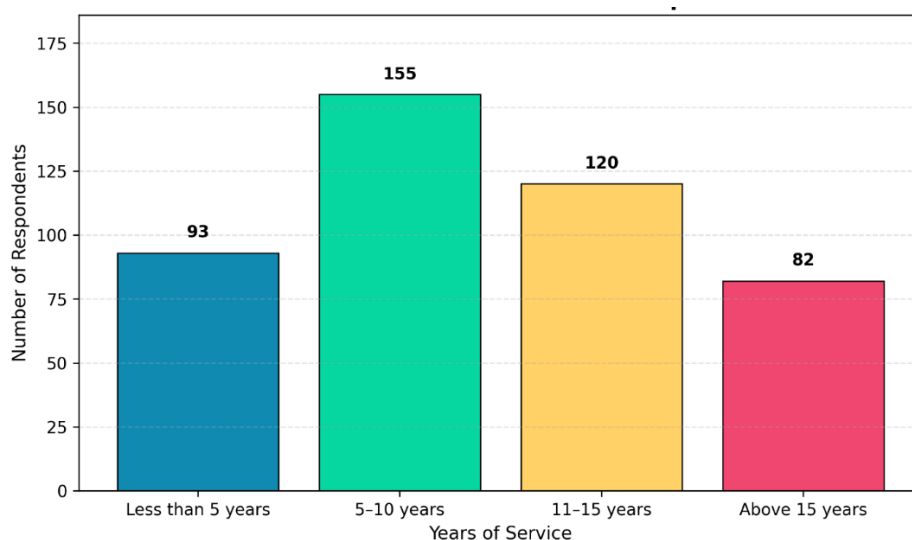


Figure 5 Years of Service Distribution of Respondents

Figure 5 presents the respondents according to their years of service in the Bank of Industry.

Data Analysis

The information gathered from the research variables which came from the administered questionnaire is analyzed in the data analysis. SMART-PLS software were used to analyze every item for this investigation.

This section presents the structural model results in relation to the study hypotheses on the effect

of strategic management practices on the performance of the Bank of Industry (BOI) in Nigeria, as well as the moderating role of environmental turbulence. The discussion is based on the correlation matrix, path coefficients, bootstrap confidence intervals, coefficient of determination (R^2), and model fit indices obtained from the PLS-SEM analysis.

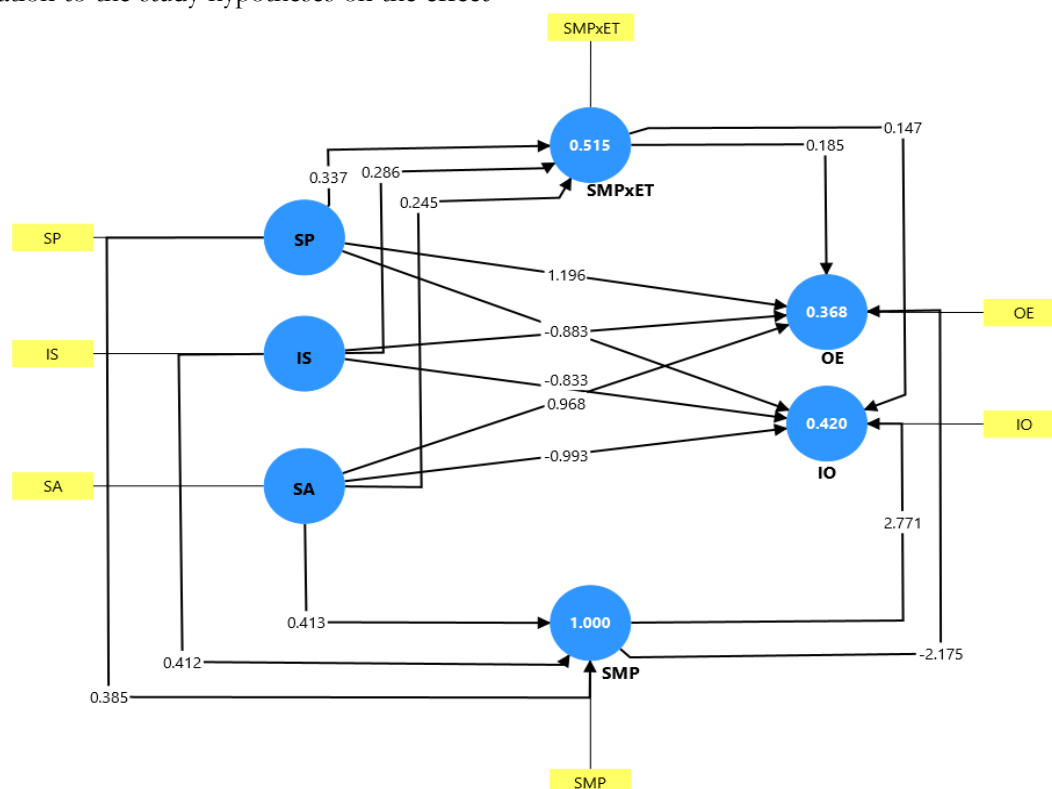


Figure 2.20: Model Path diagram

Correlation Analyses of the Study Constructs

Table 3. Correlation Matrix of the Study Constructs

Variable	IO	IS	SMP	SMPxET	SP
IO	1.000	0.562	0.635	0.526	0.511
IS	0.562	1.000	0.815	0.578	0.491
SMP	0.635	0.815	1.000	0.716	0.820
SMPxET	0.526	0.578	0.716	1.000	0.615
SP	0.511	0.491	0.820	0.615	1.000

Source: Author's Computation, (2026)

IO = Innovation Output; IS = Innovation Strategy; SMP = Strategic Management Practices; SMPxET = Interaction Term between Strategic Management Practices and Environmental Turbulence; SP = Strategic Planning.

The correlation matrix in Table 3 shows that all the major study constructs were positively associated with one another. Innovation output (IO) was positively correlated with innovation strategy (IS, $r = 0.562$), strategic planning (SP, $r = 0.511$), strategic management practices as a

composite (SMP, $r = 0.635$), and the interaction term (SMPxET, $r = 0.526$).

These positive correlations suggest that the dimensions of strategic management practices move in the expected direction with the two dimensions of organizational performance. In other words, higher levels of strategic planning, and innovation strategy are associated at the bivariate level with higher innovation output n BOI. However, correlation does not establish statistical effect in the structural model. Consequently, the path coefficients provide the basis for hypothesis testing.

Table 4. Path Coefficients for the Structural Model

Path	O	M	SD	t	p
IS -> IO	-0.833	-0.857	2.493	0.334	0.738
IS -> SMP	0.412	0.412	0.011	38.421	0.000
IS -> SMPxET	0.286	0.286	0.036	7.937	0.000
SMP -> IO	2.771	2.819	6.039	0.459	0.646
SMPxET -> IO	0.147	0.147	0.048	3.073	0.002
SP -> IO	-0.883	-0.897	2.321	0.380	0.704
SP -> SMP	0.385	0.385	0.010	38.537	0.000
SP -> SMPxET	0.337	0.337	0.041	8.284	0.000

Source: Author's Computation, (2026)

O = Original Sample; M = Sample Mean; SD = Standard Deviation; t = t-statistic; p = p-value.

Table 5. Bootstrap Confidence Intervals for Structural Paths

Path	O	M	2.5%	97.5%
IS -> IO	-0.833	-0.857	-5.847	4.029
IS -> SMP	0.412	0.412	0.392	0.434
IS -> SMPxET	0.286	0.286	0.215	0.355
SMP -> IO	2.771	2.819	-9.187	14.768
SMPxET -> IO	0.147	0.147	0.053	0.242
SP -> IO	-0.883	-0.897	-5.527	3.727
SP -> SMP	0.385	0.385	0.366	0.405
SP -> SMPxET	0.337	0.337	0.258	0.415

Source: Author's Computation, (2026)

O = Original Sample; M = Sample Mean. Confidence intervals that do not cross zero indicate statistically significant effects at the 95% confidence level.

Hypothesis One

H_{01} : There is no significant effect between strategic planning and innovation output in Bank of Industry in Nigeria.

The path coefficient from strategic planning to innovation output was negative and not statistically significant ($\beta = -0.883$, $t = 0.380$, $p = 0.704$). The bootstrap confidence interval also crossed zero ($-5.527, 3.727$), confirming the absence of a significant direct effect. Although the correlation matrix showed a moderate positive relationship between strategic planning and innovation output ($r = 0.511$), the structural model indicates that strategic planning did not exert a statistically significant direct influence on innovation output when modeled alongside the other strategic variables. Based on this result, the null hypothesis is not rejected. This implies that strategic planning, on its own, did not significantly explain variation in

innovation output in BOI. In practical terms, while planning may provide strategic direction, it may not automatically translate into visible innovation outcomes unless supported by other enabling conditions such as flexibility, implementation mechanisms, and environmental responsiveness.

Hypothesis Two

H_{02} : Innovation strategy does not have a significant effect on innovation output in Bank of Industry in Nigeria.

The path coefficient from innovation strategy to innovation output was negative and not statistically significant ($\beta = -0.833$, $t = 0.334$, $p = 0.738$). The confidence interval ($-5.847, 4.029$) crossed zero, indicating no significant effect. This result contrasts with the positive correlation observed between innovation strategy and innovation output ($r = 0.562$).

Therefore, the null hypothesis is not rejected. This suggests that although innovation strategy is positively associated with innovation output at the bivariate level, it did not independently

predict innovation output in the presence of the other predictors in the model. This may indicate overlap among the strategic management dimensions or suggest that innovation output in BOI is shaped more by the combined strategic system and environmental context than by innovation strategy alone.

Hypothesis Three

H_{03} : Environment turbulence do not have a significant moderating role between Strategic Management Practices and the Performance in Bank of Industry in Nigeria.

The moderating effect was captured through the interaction term $SMP \times ET$. The path from the interaction term to innovation output was positive and statistically significant ($\beta = 0.147$, $t = 3.073$, $p = 0.002$), with a confidence interval of (0.053, 0.242), which did not include zero. Based on these results, the null hypothesis is **rejected**. This means that environmental turbulence has a significant positive moderating role in the relationship between strategic management practices and organizational performance in BOI. In substantive terms, the performance effects of strategic management practices become stronger under conditions of environmental turbulence. This finding is highly consistent with the conceptual framework of the study, which positioned environmental turbulence as a moderator between strategic management practices and BOI performance.

The implication is that BOI's strategic management practices are more consequential when the operating environment is dynamic, volatile, unpredictable, and complex. Under such conditions, the strategic value of planning, innovation orientation, and agility becomes more pronounced in shaping

innovation output.

Higher-Order Structural Relationships

Beyond the direct hypotheses, the model also showed that the three dimensions of strategic management practices significantly contributed to the higher-order construct of SMP . Strategic planning had a significant positive effect on SMP ($\beta = 0.385$, $t = 38.537$, $p = 0.000$) and innovation strategy also had a significant positive effect ($\beta = 0.412$, $t = 38.421$, $p = 0.000$); These findings confirm that the three constructs jointly define strategic management practices in BOI. In the same vein, strategic planning ($\beta = 0.337$, $t = 8.284$, $p = 0.000$) and innovation strategy ($\beta = 0.286$, $t = 7.937$, $p = 0.000$) significantly contributed to the interaction-related construct $SMP \times ET$. This further reinforces the argument that the effect of BOI's strategic practices on performance becomes more meaningful when considered in conjunction with environmental turbulence.

Table 6. Coefficient of Determination of the Endogenous Constructs

Construct	R^2	Adjusted R^2
IO	0.420	0.414
$SMP \times ET$	0.515	0.512

IO = Innovation Output; $SMP \times ET$ = Interaction Term between Strategic Management Practices and Environmental Turbulence.

The coefficient of determination results in Table 6 show that the model explained 42.0% of the variance in innovation output ($R^2 = 0.420$), and 51.5% of the variance in the interaction-related

construct ($R^2 = 0.515$). The adjusted R^2 values were very close to the original values, indicating stability in the explanatory power of the model. These results suggest that the model had moderate explanatory power, especially for innovation output and the moderation-related construct.

Table 7. Model Fit Indices for the Structural Model

Fit Index	Saturated Model	Estimated Model
SRMR	0.000	0.008
d_ULS	0.000	0.002
d_G	0.000	0.001
Chi-square	0.000	2.203
NFI	1.000	1.000

SRMR = Standardized Root Mean Square Residual; NFI = Normed Fit Index.

The model fit indices in Table 4.13 indicate an excellent fit of the estimated model to the data. The standardized root mean square residual ($SRMR = 0.008$) was far below the commonly accepted threshold of **0.08**, indicating very good fit. The normed fit index ($NFI = 1.000$) also indicates excellent model fit. In addition, the

discrepancy measures ($d_{ULS} = 0.002$ and $d_G = 0.001$) were very low, while the chi-square value of **2.203** was minimal. Collectively, these fit statistics show that the model was properly specified and suitable for interpreting the structural relationships.

Table 8. Summary of Hypothesis Testing

Hypothesis	<i>p</i> -value	Decision	Remark
H_{01} : Strategic planning -> Innovation output	0.704	Not Rejected	Not significant
H_{02} : Innovation strategy -> Innovation output	0.738	Not Rejected	Not significant
H_{03} : SMP × Environmental turbulence -> Organizational performance	0.002 / 0.000	Rejected	Significant moderation

H_{03} was evaluated using one dependent variables: innovation output .

This section evaluates the empirical results regarding the direct impacts of strategic planning and innovation strategy on innovation output, alongside the moderating influence of environmental turbulence within the Bank of Industry (BOI). By connecting these statistical outcomes to extant literature and underlying theoretical frameworks (Hosseini et al., 2023), the study highlights how institutional practices function within a complex development finance environment. The primary objective is to determine whether isolated strategic constructs

sufficiently explain institutional performance or if their efficacy relies heavily on external contextual realities and secondary organizational capabilities (Aslam et al., 2024).

Discussion on Strategic Planning and Innovation Output

The analysis revealed a non-significant direct effect of strategic planning on innovation output, indicating that formal planning alone is insufficient to drive creative outcomes. This aligns with contingency arguments suggesting

formal plans can become ceremonial or restrictive if not coupled with flexibility (Delmond et al., 2021; Brettel et al., 2022; O'Reilly & Binns, 2023). While divergent from studies in high-tech or private sectors where agile planning directly boosts output (Mackenzie, 2024; Vecchiato, 2022; Burgelman et al., 2023), BOI's public-policy mandate and institutional rigidity limit standalone planning impacts. Consequently, formal planning serves as a necessary directional guide but requires responsive execution and supportive structures to generate tangible innovation outputs (Benson & Tan, 2024).

Discussion on Innovation Strategy and Innovation Output

Similarly, innovation strategy exhibited a non-significant direct effect on innovation output once broader systemic variables were controlled. This reinforces findings that strategy formulation requires intermediary conduits, such as absorptive capacity and knowledge integration, rather than acting through simple direct routes (Rocha et al., 2024; Cheng & Yang, 2023; De Massis et al., 2023; Bianchi et al., 2024). Unlike commercial or R&D-intensive firms where formal innovation strategies immediately yield market advantages (Lee & Lee, 2023; Nagji & Tuff, 2023; Horbach & Rammer, 2024; Song & Yu, 2022), BOI's development-focused context means innovation outputs are largely processual and policy-linked. Thus, formal innovation strategies must be actively enacted through learning-oriented systems and adequate organizational incentives to produce measurable results.

Discussion on the Moderating Role of Environmental Turbulence

Environmental turbulence significantly and positively moderated the relationship between strategic management practices and performance. This central finding demonstrates that strategic tools become profoundly more consequential when external macroeconomic and regulatory environments are volatile, complex, and unpredictable. It corroborates dynamic capabilities theory and previous

research showing that adaptive practices drive resilience and recovery during disruptions (Knight et al., 2023; Hosseini et al., 2023; Mackenzie, 2024; Warner & Wäger, 2021; Shams et al., 2023). For BOI, tools like strategic planning and innovation strategies are activated by high turbulence, transforming from routine administrative tasks into vital instruments for maintaining institutional relevance and driving developmental impact amid economic instability (Adeyemi & Salami, 2021; Folami, 2022; Udeh & Eze, 2021).

5. Conclusion

Based on the findings of this study, the following conclusions are drawn:

Strategic Management Practices as an Integrated System: The study concludes that strategic management practices in the Bank of Industry function as an integrated system rather than as isolated practices. While strategic planning, and innovation strategy are individually important, their performance effects are best understood collectively. This conclusion is supported by the significant contributions of all three dimensions to the higher-order construct of strategic management practices. The implication is that BOI should view these practices as complementary and mutually reinforcing components of a coherent strategic management framework rather than as separate activities.

The Critical Moderating Role of Environmental Turbulence: The study firmly concludes that environmental turbulence significantly moderates the relationship between strategic management practices and both dimensions of organizational performance innovation output. This is the most important finding of the study. It implies that BOI's strategic management practices are not merely routine managerial instruments; they become especially valuable when the operating environment is challenging, uncertain, and rapidly changing. The positive moderation effect suggests that BOI's ability to plan, innovate, and respond agilely is most consequential during periods of environmental upheaval, policy

instability, technological disruption, and market complexity.

Implications for Theory and Practice: Theoretically, the study concludes that future research on strategic management practices should incorporate environmental turbulence as a critical moderating variable, especially in developing country contexts and institutional settings like development finance institutions. Practically, the study concludes that BOI should invest in strengthening its strategic management capabilities, particularly those that enhance environmental sensing, adaptive execution, and strategic flexibility, as these become most valuable under turbulent conditions.

Recommendations

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

i. Strengthen the Integration of Strategic Management Practices

The study found that individual strategic practices (strategic planning, and innovation strategy) did not independently predict performance, but they collectively contribute to the higher-order strategic management construct. Therefore, BOI should develop a more integrated strategic management framework that explicitly links strategic planning, and innovation strategy as complementary and mutually reinforcing elements. This could

involve creating cross-functional strategy teams that ensure alignment across these dimensions.

ii. Build Environmental Sensing and Scanning Capabilities

Given the significant moderating role of environmental turbulence, BOI should enhance its capacity to sense, monitor, and respond to environmental changes in order to establish a dedicated environmental intelligence unit responsible for continuous scanning of technological trends, policy changes, competitive dynamics, and macroeconomic developments. This unit should provide regular reports to strategic planning and decision-making bodies.

iii. Leverage Environmental Turbulence as a Strategic Opportunity

Given that environmental turbulence amplifies the performance effects of strategic management practices, BOI should reframe environmental turbulence not merely as a threat to be managed but as an opportunity to demonstrate strategic capabilities and gain competitive advantage over less agile institutions.

6. Author Declaration

The authors declare that this work is original and has not been published elsewhere or submitted for publication in any other journal. The authors further declare that there are no conflicts of interest associated with this study.

References

- Adetiloye, K. A., Adegbite, E., & Olowokudejo, F. F. (2022). Development finance institutions and economic transformation in Nigeria: An empirical evaluation of the Bank of Industry. *Journal of African Business*, 23(4), 1012–1035. <https://doi.org/10.1080/15228916.2021.1985421>
- Adebayo, A. (2021). Cybersecurity challenges in the digital transformation of Nigerian development finance. *Journal of Financial Crime*, 28(3), 789–802.
- Adeola, O., Hinson, R. E., & Evans, O. (2023). Technological turbulence, strategic agility, and innovation outcomes in emerging market financial institutions. *Technological Forecasting and Social Change*, 188, 122285. <https://doi.org/10.1016/j.techfore.2023.122285>
- Akinbola, S. A., Adebisi, S. O., & Olawale, F. (2024). Strategic management practices and performance of financial institutions in West Africa: A dual-proxy evaluation. *African Journal of Management*, 10(2), 145–170. <https://doi.org/10.1080/23322373.2023.2294112>

- Alharthy, M., Rashid, A., & Ahmad, S. (2023). Strategic management practices and firm performance in emerging markets: A systematic review. *Management Review Quarterly*, 73(2), 541–568. <https://doi.org/10.1007/s11040-1061-00288-y>
- Barney, J. B. (2021). Resource-based views of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 47(1), 40–52.
- Bianchi, C., Cavallari, M., & Del Pizzo, A. (2023). Dynamic strategic planning in turbulent environments: A system dynamics approach. *Long Range Planning*, 56(3), 102264. <https://doi.org/10.1016/j.lrp.2023.102264>
- Chukwuma, E., & Bello, M. (2022). Macroeconomic volatility and operational costs of manufacturing firms in Nigeria. *Nigerian Journal of Financial Research*, 14(2), 88–104.
- Eze, C. B., & Okoye, V. A. (2024). Operational efficiency and innovation output in Nigerian development finance. *Journal of Development and Agricultural Economics*, 16(1), 45–58. <https://doi.org/10.5897/JDAE2023.1342>
- Ghasemzadeh, P., Nazari, M., & Fard, M. E. (2024). Strategic management tools and organizational performance: Evidence from developing economies. *Journal of Business Research*, 171, 114382. <https://doi.org/10.1016/j.jbusres.2023.114382>
- Ibrahim, M., & Hassan, A. (2023). Discontinuous instability and strategic adaptation in Sub-Saharan African economies. *African Journal of Economic and Policy*, 30(1), 45–69.
- Nwankwo, C., & Eze, V. (2024). Digital innovation output and operational dynamics in Nigerian development banking. *Journal of Banking and Financial Technology*, 8(1), 33–50. <https://doi.org/10.1007/s41040-1061-00055-x>
- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Harvard Business School Press.
- Obi, J., Nnaji, G., & Akpan, E. (2023). Macroeconomic volatility and environmental turbulence in the Nigerian financial sector: Implications for institutional resilience. *Nigerian Journal of Economic and Social Studies*, 65(2), 211–235.
- Okeke, P., & Nnamdi, C. (2025). Monetary policy shocks, regulatory turbulence, and development finance in Nigeria. *African Development Review*, 37(1), 112–128. <https://doi.org/10.1111/1040-1061.12750>
- Oladipo, O., Adeleke, A., & Salami, A. (2022). Environmental turbulence and corporate agility: Conceptual clarifications and empirical realities. *Journal of Strategy and Management*, 15(4), 601–618. <https://doi.org/10.1108/JSMA-1040-1061-0165>
- Okonkwo, C. P., & Iyiola, O. O. (2022). Environmental turbulence dimensions and strategic responses of financial institutions in Nigeria. *Journal of Global Entrepreneurship Research*, 12(1), 89–104. <https://doi.org/10.1007/s41040-1061-01040-1061>
- Olayemi, S. O., & Abdullateef, R. (2021). Comparative analysis of strategic management practices in commercial versus development banks in Nigeria. *Journal of African Financial Studies*, 9(3), 112–129.
- Oyeniyi, O. (2024). Competency traps and AI adoption in Nigerian financial institutions. *Technological Forecasting and Social Change*, 199, 123045. <https://doi.org/10.1016/j.techfore.2024.123045>
- Saunila, M. (2023). Innovation capability, innovation strategy, and performance of financial institutions. *European Journal of Innovation Management*, 26(3), 720–741. <https://doi.org/10.1108/EJIM-1040-1061-0089>
- Small and Medium Enterprises Development Agency of Nigeria [SMEDAN]. (2022). *National MSME survey report: Financing gaps and institutional intervention frameworks*. SMEDAN & National Bureau of Statistics.
- Teece, D. J., Peteraf, M. A., & Leih, S. (2021). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 63(4), 13–35.
- Wolf, C., & Floyd, S. W. (2023). Strategic planning routines and middle management participation in turbulent contexts. *Strategic Management Journal*, 44(5), 1120–1148. <https://doi.org/10.1002/smj.3480>

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- Yusuf, A. (2023). Foreign exchange volatility and import-dependent industries in Nigeria: Implications for development finance. *Journal of African Trade*, 10(1), 55–72.
- Yusuf, M., & Dansu, F. (2023). Balancing financial returns and developmental impact in Nigerian DFIs. *Journal of Public Administration and Policy Research*, 15(2), 89–105.