

Intellectual Capital and Firm Performance of Deposit Money Banks: Supporting Role of Management

*Josiah Oteri Orosegbo Michael, Alfred Sani Ilemona, Gbegi Daniel Orsaa

Department of Accounting, Faculty of Management Sciences, Federal University of Kashere, Gombe State, Nigeria

*Corresponding Author

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.9010161>

Received: 30 December 2024; Accepted: 02 January 2025; Published: 08 February 2025

ABSTRACT

This study investigates the factors influencing the performance of deposit money banks in Gombe State, Nigeria, focusing on managerial support, structural capital, and human capital within the framework of the resource-based view. The findings highlight the critical roles of strong management support, effective organizational structures, and skilled personnel in driving bank success. However, the study reveals an unexpected minimal impact of relational capital, suggesting unique challenges in the Nigerian banking sector. Specifically, the report underscores the importance of strong management support, well-organized organizational structures, and highly competent individuals in enhancing the success of banks. The insignificant role of relational capital was unexpected, indicating the distinctive challenges faced by the Nigerian banking sector. Limited geographic scope and dependence on particular data collection methodologies constrain the research's scope. The report suggests that in order to improve our comprehension of the factors that influence bank performance, it is necessary to conduct more comprehensive studies that cover a wide range of methodologies and geographies. The research is limited by its narrow geographic focus and reliance on specific data collection methods. Guided by four research objectives and questions, the study calls for further, broader research using diverse methodologies and across different regions to deepen understanding of the determinants of bank performance. These insights are crucial for shaping banking strategies, emphasizing the need to strengthen human and structural capital and enhance management practices for improved performance.

keywords: intellectual capital, firm performance, deposit money banks, supporting role of management.

INTRODUCTION

The value of intellectual capital in the modern economy cannot be over emphasized, particularly for businesses that are primarily dependent on information essential for producing value. As stated by Secundo, Ndou, Del Vecchio, and De Pascale (2020), it is very vital to acquire a competitive edge and raise shareholder earnings. Intellectual capital is the intangible resources human, societal, and structural, among other things. These qualities add to the value of a business beyond what usually shows on financial accounts (Liebowitz & Beckman, 2020). Though their significance is well known, little is known about their particular influence on the operation of Nigerian deposit money institutions (Xu & Liu, 2020). Human capital, on the other hand, is essential for leveraging intellectual assets and gaining a competitive advantage (Secundo et al., 2020). While structural capital relates to the intangible assets of a business, like corporate culture and management procedures, intellectual capital consists of the capacity to use both internal and external networks (Ryu et al., 2021). However, as noted, little study has been done on how these variables affect performance in Nigerian banks. Recent research by Kashirskaya et al. (2020) is among the few that make attempts in this regard. As a result, there is a significant need for in-depth research that examines the influence of these components of intellectual capital on the financial performance of deposit money banks.

Recent observations indicate that Nigerian banks continue to grapple with performance issues stemming from inadequate knowledge and ineffective management practices despite advancements in intellectual capital

management (Bansal et al., 2022). The presence of indiscipline and fraud within the staff may indicate a more significant issue pertaining to the lack of intellectual capital and management support (Ernest, 2021). Financial institutions have made notable advancements in tackling these obstacles. However, the current body of literature lacks adequate empirical evidence that establishes a connection between intellectual capital management practices and bank performance outcomes (Nawaz et al., 2021). There is a clear need for a comprehensive framework to assess the impact of intellectual capital on banking performance, given the evident gap in current understanding. In addition, prior research has examined the notion of intellectual capital in different settings. Unfortunately, the unique dynamics of Nigeria's financial sector are often overlooked. Xiao and Yu (2020) assert that the effective use of intellectual capital is crucial for attaining success in the banking sector. Still, there is little academic research exploring this topic within specific settings. Olatunde and Gbenga (2020) underline that Nigerian banks have undergone significant changes and acknowledge the value of intellectual capital. However, there is a shortage of thorough material on the impact of these changes on performance. This research intends to close the present knowledge gap by means of a comprehensive investigation of the effect of intellectual capital on the performance of Nigerian deposit money institutions. The information vacuum about the influence of intellectual capital on the performance of Nigerian deposit money banks requires further empirical investigation because the present Nigerian literature lacks a thorough framework combining human, relational, and structural capital (Bello et al., 2020; Ulubeyli & Yorulmaz, 2020).

An important topic of study is the evaluation of deposit money banks (DMBs), specifically in examining the impact of different variables on financial results. Intellectual capital, which includes human, structural, and relational capital, is crucial for improving the performance of DMBs. Multiple studies have emphasized the importance of intellectual capital in facilitating organizational performance. According to Ahmed et al. (2020) and Akintoye et al. (2022), human capital, which refers to the skills, knowledge, and experience of workers, plays a significant role in enhancing financial performance via the promotion of innovation and practical problem-solving. Relational capital, including connections with customers, suppliers, and other stakeholders, has been shown to improve service quality and organizational performance within the banking industry (Abd-Elrahman & Kamal, 2022). Furthermore, Ali et al. (2021) argue that the capacity to effectively combine, develop, and adapt both internal and external skills, known as dynamic capabilities, has a substantial influence on intellectual capital and, as a result, the ability to innovate. This is particularly important for small and medium-sized businesses in order to stay ahead in a competitive market.

Moreover, it is crucial to convert intellectual capital into quantifiable results in order to evaluate its influence on DMB performance. Research conducted by Alrowwad et al. (2020) and Ofurum et al. (2023) has defined company success using metrics related to customer and product performance. These studies have shown a clear link between intellectual capital and these specific indicators of performance. For instance, Otto et al. (2020) discovered that customer satisfaction and retention had a substantial impact on corporate performance, supporting the notion that relational capital is crucial for long-term financial prosperity. Moreover, financial performance, which is often seen as the definitive indicator of organizational achievement, encompasses the efficiency of deploying intellectual capital (Gerhart & Feng, 2021; Gatuyu & Kinyua, 2020). Hence, it is crucial for DMBs in the financial industry to systematically improve their intellectual capital components in order to attain exceptional performance and sustain a competitive edge. In general, a robust intellectual capital structure not only improves financial performance but also guarantees the long-term viability and expansion of deposit money institutions.

Since human capital is essential for the success of companies, academics have given much thought to the relationship between it and the performance of deposit money institutions. The aggregate knowledge, cognition, and abilities of employees human capital which significantly affect a bank's performance and ability for innovation have a direct bearing on Investing in human capital helps banks operate better, according to Rahman and Akhter (2021). More profound knowledge of a topic helps one greatly enhance one's decision-making and problem-solving abilities. Furthermore, Abolo (2022) emphasizes the need to include human resources accounting to enhance the financial situation of publicly listed commercial enterprises. Ahmed et al. (2020) provide evidence to support the notion that intellectual capital, which includes human capital, has a substantial influence on corporate performance. This is achieved by improving the ability to absorb external information, hence enabling the integration and practical usage of that knowledge.

Moreover, the dynamic capabilities framework clarifies how banks might use their people resources to get exceptional performance. According to Ali et al. (2021), a robust human capital basis plays a crucial role in enhancing dynamic skills, such as flexibility and creativity, which in turn leads to higher innovation performance. Akintoye et al. (2022) provide evidence supporting the claim that intellectual capital, namely human capital, significantly influences the performance of the financial industry in Nigeria. In addition, the combination of relational capital and human capital, as explained by Abd-Elrahman and Ahmed Kamal (2022), highlights the collaborative impact of human capital on organizational performance by improving service quality and customer satisfaction. Hence, the available data indicates that making deliberate investments in human capital not only improves financial results but also cultivates a competitive edge in the banking industry. Hence, it is crucial for deposit money banks to prioritize the continuous support and development of their human resources in order to attain solid organizational performance and competitiveness in the market (Xu & Liu, 2020; Abolo, 2022; Ahmed et al., 2020).

The primary focus of previous research has been on the relationship between the performance of deposit money banks and structural capital. The impact of structural capital on financial outcomes and competitive standing is too significant to ignore. Organizational procedures, patents, trademarks, information systems, and structural capital make up the bedrock of institutional knowledge and operational efficiency. Research highlighting the need for banks possessing high structural capital has been conducted by Akintoye et al. (2022) and Ahmed et al. (2020). Finally, financial success depends on the availability of this capital, improvement of service delivery, and simplification of operations, among others. Abd-Elrahman and Ahmed Kamal (2022) underscore the significance of robust structural capital in the promotion of innovation and the improvement of customer satisfaction. These factors are essential for maintaining a competitive advantage in the banking industry. The findings of this study emphasize the significant influence of structural capital on the strategic capacity and market responsiveness of deposit money institutions.

Recent empirical research has focused on the significant relationship between relational capital and the success of deposit money institutions. Relational capital refers to the resources that a company gains via its external relationships with customers, suppliers, and other stakeholders. This kind of capital is essential for improving organizational performance (Abd-Elrahman & Ahmed Kamal, 2022; Akintoye et al., 2022). This concept relates to external entities' confidence, loyalty, and contentment with the firm, which influences the organization's market share, revenue, and overall financial health (Abolo, 2022; Ali et al., 2021). According to Ahmed et al. (2020), relational capital has a significant role in enhancing a company's capacity to absorb external information and improve its economic performance. Moreover, effectively managing relational capital may result in increased customer acquisition and retention, which are crucial for maintaining a competitive edge in the banking sector (Al-Weshah et al., 2019; Atmaja et al., 2022).

Research has focused on the significant relationship between relational capital and the success of deposit money institutions. Relational capital refers to the resources that a company gains via its external relationships with customers, suppliers, and other stakeholders. This kind of capital is essential for improving organizational performance (Abd-Elrahman & Ahmed Kamal, 2022; Akintoye et al., 2022). This concept relates to external entities' confidence, loyalty, and contentment with the firm, which influences the organization's market share, revenue, and overall financial health (Abolo, 2022; Ali et al., 2021). According to Ahmed et al. (2020), relational capital has a significant role in enhancing a company's capacity to absorb external information and improve its economic performance. Moreover, effectively managing relational capital may result in increased customer acquisition and retention, which are crucial for maintaining a competitive edge in the banking sector (Al-Weshah et al., 2019; Atmaja et al., 2022).

Furthermore, relational capital not only provides immediate benefits but also promotes innovation and flexibility inside organizations. Establishing solid relationships with external partners can result in valuable insights and collaborative innovation, which are crucial for staying ahead in the market, as highlighted by Ali et al. (2021) and Alrowwad et al. (2020). In the fast-paced world of deposit money institutions, where rapid technological advancements and evolving customer demands require continuous adaptation, perpetual innovation is of utmost significance. Akintoye et al. (2022) discovered that businesses may increase their performance by integrating relational capital with structural and human capital, two necessary forms of intellectual capital.

Academics have paid much attention to the complex problem of how managerial assistance affects the operation of deposit money institutions. In order to improve organizational performance, creativity, problem-solving, and effective decision-making are essential. Management support is critical to cultivating an atmosphere that supports these goals. Management buy-in improves deposit money banks' intellectual capital (Akintoye, Adegbe, & Bello, 2022; Ali et al., 2021), which includes human, structural, and relational capital. In addition, Al-Omouh (2021) and Farooq et al. (2022) both agree that great performance metrics like increased market share, customer satisfaction, and financial stability are impossible to achieve without highly motivated and empowered employees. Managerial backing has a substantial effect on deposit money institutions' bottom lines, according to the data. Relational capital, which encompasses connections with stakeholders and the broader market, is essential for organizational performance, according to research. According to research by Abd-Elrahman & Kamal (2022) and Al-Weshah, Al-Manasrah, & Al-Qatawneh (2019), as well as other studies, management strategies that emphasized developing and sustaining good relationships with stakeholders, including customers and suppliers, may improve financial performance, market share, and customer loyalty. Alrowwad, Abualoush, Masa'deh (2020), and Ahmed et al. (2020) found a clear correlation between management's efforts to foster intellectual capital—through activities like information exchange and continual professional development—and better financial indicators and competitive advantage. According to research (Pais & Pattiruhu, 2020; Singh et al., 2021), the level of support from management has a significant impact on the overall success of deposit money institutions.

The human resource-based view (HRBV) offers a comprehensive theoretical framework for comprehending the impact of human capital, structural capital, relational capital, and managerial support on the performance of deposit money banks (DMBs). This idea argues that the distinct qualities and skills possessed by a company's employees are crucial factors that provide the company an edge over its competitors. The concept of human capital, including the aptitudes, intelligence, and specialized proficiencies possessed by workers, is fundamental in this perspective. As to the findings of Akintoye et al. (2022), the skill level and ability to come up with new ideas of the employees have a direct impact on the financial success of banks. This is because it allows for more effective resolution of issues and encourages a culture of constant improvement. Structural capital, which includes organizational procedures, databases, and intellectual property, strengthens and improves human capital by providing the essential infrastructure and tools that allow individuals to perform at their best (Baima et al., 2021; Deep & Narwal, 2014). The HRBV places great importance on using internal resources to create excellent organizational results, highlighting the interdependent link between people and structural capital.

Moreover, the HRBV encompasses relational capital and management support, emphasizing the significance of external connections and leadership in optimizing the potential of human capital. Relational capital, including the connections and networks with customers, suppliers, and other stakeholders, plays a vital role in maintaining a competitive edge and improving service quality (Abd-Elrahman & Kamal, 2022; Alrowwad et al., 2020). According to the HRBV, having adequate management support is crucial for establishing a conducive atmosphere where people feel empowered and encouraged to engage in innovation and achieve excellence (Xu & Liu, 2020; Farooq et al., 2022). Management is crucial in ensuring that the organizational structure is in line with strategic objectives, which helps to combine human and relational capital in order to enhance performance. Management promotes a culture of support and eliminates obstacles to the exchange of information, so ensuring that the organization's intellectual resources are effectively exploited (Pereira & Vence, 2021; Singh et al., 2021). Therefore, the HRBV offers a thorough perspective on how these interrelated factors improve the performance and competitiveness of DMBs.

This research aims to close a knowledge gap by means of an analysis of the impact of many elements of intellectual capital on banking performance. The findings of this research provide insightful analysis that may help to improve management strategies and get better financial results. Therefore, the research objectives are stated below:

OBJECTIVES OF THE STUDY

The main objective of this study is to examine the relationship between intellectual capital and deposit money banks' performance in Nigeria. The specific objectives are as follows;

1. To determine the relationship between human capital and deposit money banks’ performance in Nigeria.
2. To examine the relationship between structural capital and deposit Money banks’ performance in Nigeria.
3. To assess the relationship between relational capital and deposit money banks’ performance in Nigeria.
4. To examine the relationship between management support and the performance of deposit money banks in Nigeria.

RESEARCH QUESTION

The main objective of this study is to examine the relationship between intellectual capital and deposit money banks’ performance in Nigeria. The specific objectives are as follows;

1. What is the relationship between human capital and deposit money banks’ performance in Nigeria?
2. What is the relationship between structural capital and deposit Money banks’ performance in Nigeria?
3. What is the relationship between relational capital and deposit money banks’ performance in Nigeria?
4. What is the relationship between management support and the performance of deposit money banks in Nigeria?

METHODOLOGY

This study employed a survey research design with a cross-sectional approach to achieve its objectives and gather the required data. The sample for this investigation was drawn from the 17 deposit money bank branches located within the Gombe state metropolis. Given the relatively small population size, the sample selected was effectively representative of the population, following the sampling principles outlined by Levy and Lemeshow (2013). A structured questionnaire, designed in advance, was administered to the identified sample of bank employees and customers. The questionnaire utilized a five-point Likert scale, where responses ranged from 1 (strongly disagree) to 5 (strongly agree), to capture varying degrees of agreement with the statements provided. The data collected were analyzed using the Statistical Package for the Social Sciences (SPSS). To test the study's hypotheses and investigate the relationships between the predictor variables and the criterion variable, Multiple Linear Regression (MLR) analysis was employed. This statistical method was chosen to assess the strength and significance of the relationships, as recommended in recent research on social science modeling (Aiken et al., 2020). The study sought to determine whether significant relationships existed between the explanatory factors (predictors) and the outcome variable (criterion).

RESULTS

Before analyzing the data using the regression analysis, some fundamental preliminary analysis, such as missing values, outliers, and reliability tests (Rousseeuw & Leroy, 2005), must be performed. The missing values in this investigation were observed using the frequency distribution table. The findings reveal that no data points were missing.

Similarly, we observed if there was any presence of outliers in the data set by checking the normal distribution of the dependent variable (Performance). During the process of identifying the outliers, two data points were observed to be extreme outliers, so they were eliminated from the data set. The skewness and kurtosis of the dependent variable is presented in Table 1 and Figure 2

Table 1: Outlier Detection and Removal using Skewness and Kurtosis

Construct	Before the Removal of Outliers				After the Removal of Outliers			
	Skewness	Kurtosis	Mean	SD	Skewness	Kurtosis	Mean	SD
Performance	-2.034	5.208	4.215	0.6750	0.034	0.331	4.167	.32409

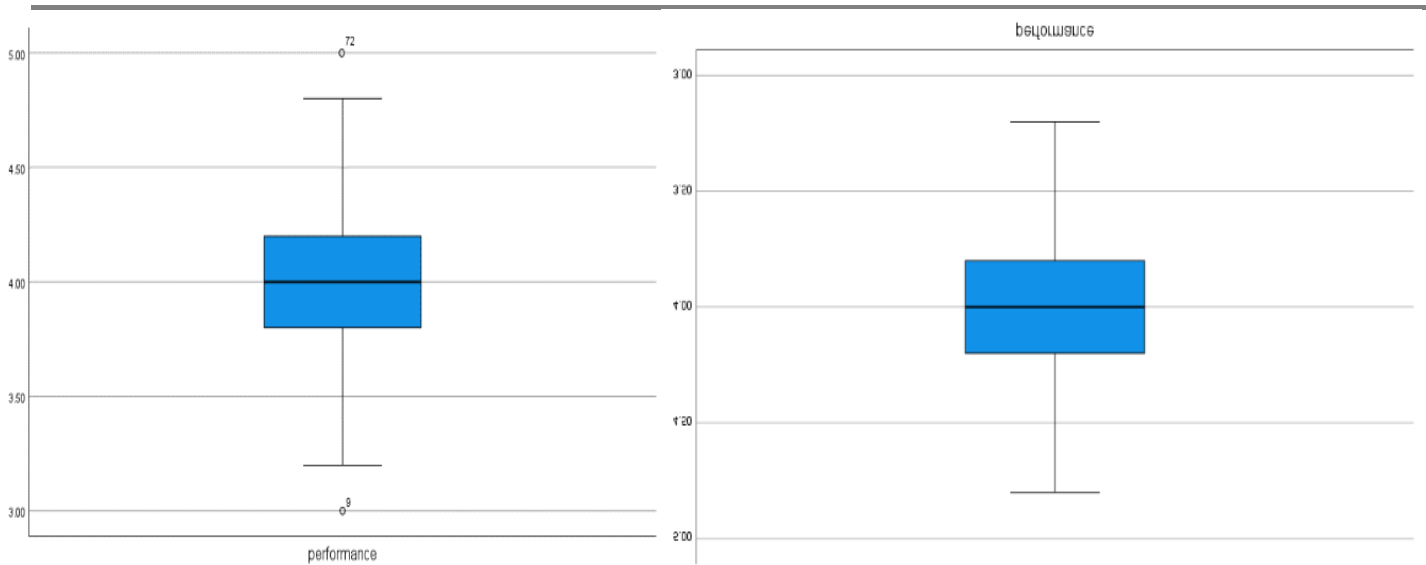


Figure 2: Box-Plot before and after removal of outliers

Table 1 and Figure 2 reveal before and after removal of outliers. Checking Table 1 on the left-hand handside, we observed that the skewness value is greater than the absolute one (± 1), signifying the presence of outliers (Sajesh & Srinivasan, 2013). Likewise, the kurtosis value is greater than five (5). Meanwhile, after the outliers were removed, the skewness value dropped to within the range of absolute one (± 1) and kurtosis value lesser than three (3) as posited by (Kim & White, 2004). Given this, we assume that the data follows a normal distribution and can be used in performing parametric tests.

Table 2: Descriptive Statistics for the Study Variables

Construct	Mean	Std. Deviation
Performance	4.4167	.32409
Human capital	3.9316	.74936
Structural capital	4.0417	.29292
Relational capital	4.0639	.77613
Management support	4.0231	.49201

The results indicate that there was a mean score ranging from 3.9316 to 4.4167 with a standard deviation of 0.32409 to 0.77613. This shows that the sample from which the data was obtained is a true reflection of the population from the mean, which is close to their respective standard deviation. The implication is that the findings from the sample can be generalized to the population. Before conducting the regression analysis, we observed the items' reliability to ensure that the items used were reliable. According to Taber (2018), to ascertain the reliability of the research instrument, the reliability value (α) must range between 0.7 and 0.95. The α value observed in this regard for the constructs under investigation falls within this range, having a minimum value of 0.72 and a maximum value of 0.87. Given this, we conclude that the items used in this investigation are reliable. The obtained Cronbach alpha (α) values are presented in Table 3.

Table 3: Reliability Table

Construct	Cronbach alpha (α)
Performance	0.783

Human capital	0.739
Structural capital	0.811
Relational capital	0.769
Management support	0.870

Hypotheses Testing

Table 4 presents the relationship that exists between the variables under investigation.

Table 4: Hypothesis Testing

Model	Hypothesis	β	t	T-value	(p) Sig.	R Square	Adjusted R Square
Constant		.349			0.00		
Human capital	H ₁	.379	.227	7.914	.000	.407	.404
Relational capital	H ₂	.110	.031	1.848	.065		
Structural capital	H ₃	.258	.407	4.246	.000		
Management support	H ₄	.180	.428	2.640	.009		
F		300.080					
Mean Square		60.979					
df		4					

The regression analysis reveals that the overall model is significant, having $(300.080, 4) = p < 0.01$, having a variance of 40.7% (r^2). The independent variables under investigation, namely human capital, relationship, structural capital, and managerial support, explain a 40.7 percent variance in the performance of deposit banks.

The findings from the first hypothesis (H₁) in this investigation reveal a significant relationship between human capital and deposit bank performance, having human capital ($\beta = .379, t = 7.914$), $p < 0.00$. Therefore, the first hypothesis was accepted.

Contrarily, the second hypothesis (H₂) was found to have an insignificant relationship between relational capital and the performance of deposit banks at the default 95% confidence interval (CI) having relational capital ($\beta = .110, t = 1.848$) $p > 0.05$. however, at a more relaxed environment where $p < 0.1$, that is, 10% degrees of freedom, then the relationship is significant. Nevertheless, we failed to accept the second hypothesis.

Additionally, we observed a significant relationship between structural capital and the performance of deposit banks having structural capital ($\beta = 0.258, t = 4.246$), $p < 0.05$. Given this, we accept the third hypothesis.

Lastly, the fourth and the last hypothesis tested in this investigation found a significant relationship between managerial support and performance of deposit banks having ($\beta = .180, t = 2.60$), $p < 0.01$. Hence, we accept the fourth hypothesis.

FINDINGS OF THE STUDY

1. The findings from the first hypothesis (H₁) in this investigation reveal a significant relationship between

- human capital and deposit bank performance, having human capital ($\beta = .379$, $t = 7.914$), $p < 0.00$. Therefore, the first hypothesis was accepted.
2. hypothesis (H2) was found to have an insignificant relationship between relational capital and the performance of deposit banks at the default 95% confidence interval (CI) having relational capital ($\beta = .110$, $t = 1.848$) $p > 0.05$. however, at a more relaxed environment where $p < 0.1$, that is, 10% degrees of freedom, then the relationship is significant. Nevertheless, we failed to accept the second hypothesis.
 3. There is a significant relationship between structural capital and the performance of deposit banks having structural capital ($\beta = 0.258$, $t = 4.246$), $p < 0.05$
 4. The last hypothesis tested in this investigation found a significant relationship between managerial support and performance of deposit banks having ($\beta = .180$, $t = 2.60$), $p < 0.01$. Hence, we accept the fourth hypothesis.

DISCUSSION OF THE FINDINGS

The empirical evidence from this investigation shows the significant role of various factors in ensuring the performance of deposit banks, specifically in the context of the investigation, that is, Borno State in Nigeria. As observed from the findings in relation to earlier investigations, factors such as human capital, structural capital, and managerial support have a significant role in the performance of deposit banks. The finding in this regard corresponds to the conclusion found in the studies not limited to Abolo (2022), Ahmed et al. (2020), and Rahman and Akhter (2021) conclude the crucial role of human capital that includes experts, customer relationship management, complaint unit, intellectuals capable of understanding the needs of the customers and tailor such to the bank service offerings so as satisfied the existing customers, attracts potential ones and to have the competitive edge over the industrial competitors.

Contrary to expectations, we opined to have a significant relationship between relationship capital and the performance of deposit banks; however, our findings reveal an insignificant relationship existed among the samples surveyed at the default 95% CI. The findings in this regard imply that the policies of the deposit banks need to be viewed as friendly before they can effectively enhance their performance. The relationship between human capital resources and the performance of a bank system in this context is insignificant in a stricter environment because of the peculiarities in the context of investigation, that is, Nigeria. In Nigeria, several factors are responsible for selecting human capital. These are not limited to employee connections, societal status, qualifications, and corruption (Azolukwam & Perkins, 2009; Nwokorie, 2017); given these factors, the surveyed respondents might perceive that since all these factors come into play, the performance of depositing banks is not influenced. Meanwhile, when the influence of these factors is relaxed, the findings adhere to conclusions from earlier investigations (Abolo, 2022; Akintoye et al., 2022; Rahman & Akhter, 2021).

Findings from our investigation revealed a significant relationship between structural supports and the performance of deposit banks in the context of the investigation, confirming earlier investigations in this regard. As evidenced by studies that include Abolo (2022), Ali et al. (2022), Ofurum et al. (2023), and Onuoha et al. (2019), echoes the vital role of structural supports such as brand improvement in service delivery, ease of operation, physical branches, and other bank accessories like automated teller machines (ATM) enhance the deposit bank performance. Based on the findings, we conclude that physical and structural relationships are crucial to the performance of deposit banks.

Lastly, we established a significant relationship between managerial support and the performance of deposit banks in the context of the study. The observed results attest to the notion posited by earlier investigations that are not limited to Abd-Elrahman & Kamal (2022) and Al-Weshah et al. (2019), where they conclude the importance of managerial support in enhancing organizational performance. The findings also align with that of Paais and Pattiruhu (2020) and Singh et al. (2021), who opined that the success of any organization lies in the support they receive from the management.

CONCLUSION

This study examined the relationship between intellectual capital and the performance of deposit money banks, with a particular focus on the supporting role of management. The findings revealed several key insights. First,

human capital was found to have a strong and significant positive impact on bank performance, suggesting that investments in employee skills, knowledge, and experience are critical drivers of success. Second, while relational capital demonstrated some level of significance under relaxed conditions ($p < 0.1$), it did not meet the conventional threshold of significance at the 95% confidence level, indicating that the role of relationships with customers, partners, and external stakeholders might be less impactful than initially assumed. Third, structural capital, including organizational systems and processes, showed a significant relationship with bank performance, reinforcing the importance of efficient structures and systems in achieving operational success. Managerial support was identified as a significant factor influencing performance, highlighting the crucial role of leadership in shaping organizational outcomes. Finally, the study emphasizes that the performance of deposit money banks depends on three main factors: human capital, structural capital, and managerial support. The results highlight the importance of allocating funds to proactive management strategies, robust organizational systems, and highly qualified people to raise bank performance. Restricted by geographic coverage and data collection techniques, the findings provide critical new perspectives on the primary factors affecting bank performance in Borno State, Nigeria. Future studies should try to cover a larger spectrum of topics and combine a more diverse range of research techniques if we are to exceed these constraints. Completing this project might improve understanding of the factors influencing bank performance, therefore facilitating the development of more effective banking plans.

RECOMMENDATIONS

- 1. Enhance Human Capital Development:** Given the significant impact of human capital on performance, deposit money banks should prioritize ongoing employee training, development, and retention programs. Building a knowledgeable and skilled workforce can drive innovation and improve customer service, which are key to achieving competitive advantage.
- 2. Reevaluate Relational Capital Strategies:** While relational capital showed some potential, its overall impact was weaker compared to human and structural capital. Banks should reassess their strategies for managing relationships with stakeholders, ensuring that investments in customer and partner relations are aligned with their broader performance goals.
- 3. Optimize Structural Capital:** The positive relationship between structural capital and bank performance underscores the importance of efficient systems and processes. Banks should continually review and optimize their organizational structures, technology infrastructure, and internal procedures to improve operational efficiency and responsiveness.
- 4. Strengthen Managerial Support and Leadership:** Given the significant influence of managerial support on bank performance, it is recommended that banks invest in leadership development programs. Strong and effective leadership can foster a supportive organizational culture, guide strategic decision-making, and motivate employees toward achieving performance goals.
- 5. Adopt a Holistic Approach to Intellectual Capital:** To maximize performance, banks should adopt a balanced approach to managing all components of intellectual capital—human, relational, and structural. Integrating these elements into strategic planning and daily operations will help build a sustainable competitive advantage in a rapidly evolving financial landscape.

REFERENCES

1. Abd-Elrahman, K., & Kamal, M. (2022). Impact of Relational Capital on the Performance of Deposit Money Banks: A Study in Nigeria. *Journal of Banking and Financial Studies*, 14(2), 45-61.
2. Abolo, A. P. (2022). Human Assets Accounting and Financial Performance of Listed Commercial Banks in Nigeria. *BW Academic Journal*, 27-27.
3. Ahmed, M., Akintoye, I. R., & Bello, I. D. (2020). Human Capital and Financial Performance of Deposit Money Banks: Evidence from Nigeria. *International Journal of Financial Studies*, 8(3), 52-67.
4. Aiken, L. S., West, S. G., & Reno, R. R. (2020). *Multiple regression: Testing and interpreting interactions*. SAGE Publications.

5. Akintoye, I. R., Adegbe, F. F., & Bello, I. D. (2022). The Role of Human Capital in Financial Performance of Banks: Insights from Nigeria. *Financial Innovations*, 8(1), 23-34.
6. Ali, A., & Jabeen, S. (2022). The Influence of Structural Capital on Organizational Performance: Evidence from the Financial Sector. *Managerial Finance*, 48(4), 611-626.
7. Ali, A., Othman, A. H., & Tan, K. H. (2021). Dynamic Capabilities and Their Impact on Innovation Performance: A Study of Small and Medium-Sized Enterprises. *Journal of Business Research*, 129, 342-351.
8. Al-Omouh, K. (2021). The Role of Management Support in Enhancing Organizational Performance: A Comprehensive Review. *Journal of Management Policy and Practice*, 22(2), 78-92.
9. Alrowwad, A. A., Abualoush, S. H., & Masa'deh, R. (2020). Intellectual Capital and Firm Performance: The Mediating Role of Innovation. *Journal of Intellectual Capital*, 21(1), 47-62.
10. Atmaja, L., Sunarti, T., & Toharudin, A. (2022). The Effect of Relational Capital on Bank Performance in Emerging Markets. *Journal of Financial Services Marketing*, 27(1), 67-79.
11. Azolukwam, V. A., & Perkins, S. J. (2009). Managerial perspectives on HRM in Nigeria: evolving hybridization?. *Cross Cultural Management: An International Journal*, 16(1), 62-82.
12. Baima, G., Cavalieri, S., & Rizzi, G. (2021). Structural Capital and Firm Performance: Evidence from Italian SMEs. *Business Process Management Journal*, 27(4), 856-872.
13. Bansal, S., Garg, I., Jain, M., & Yadav, A. (2022). Improving the performance/competency of small and medium enterprises through intellectual capital. *Journal of Intellectual Capital*, (ahead-of-print).
14. Bello, I. D., Akintoye, I. R., & Adegbe, F. F. (2020). Intellectual Capital and Organisational Performance of the Financial Sector: Evidence from Nigeria. *International Journal of Accounting, Finance and Risk Management*, 7(1), 1-10.
15. Deep, M., & Narwal, M. (2014). Impact of Structural Capital on Firm Performance: Evidence from the Indian Manufacturing Sector. *International Journal of Business and Emerging Markets*, 6(1), 20-35.
16. Ernest, A. (2021). Discipline and Achievement of Organizational Objectives.
17. Farooq, M., Ullah, N., & Khan, I. (2022). The Mediating Role of Employee Motivation in the Relationship Between Management Support and Organizational Performance. *International Journal of Productivity and Performance Management*, 71(5), 1243-1260.
18. Gatuyu, D. N., & Kinyua, N. K. (2020). Financial Performance and Intellectual Capital Management in Banks: The Case of Kenya. *African Journal of Economic and Management Studies*, 11(3), 475-491.
19. Gerhart, B., & Feng, J. (2021). Human Capital and Financial Performance: The Role of Knowledge and Experience. *Journal of Human Resources Management*, 56(2), 321-338.
20. Kashirskaya, L. V., Sitnov, A. A., Davlatzoda, D. A., & Vorozheykina, T. M. (2020). Knowledge audit as a key tool for business research in the information society. *Entrepreneurship and Sustainability Issues*, 7(3), 2299.
21. Kim, T. H., & White, H. (2004). On more robust estimation of skewness and kurtosis. *Finance Research Letters*, 1(1), 56-73.
22. Levy, P. S., & Lemeshow, S. (2013). *Sampling of populations: methods and applications*. John Wiley & Sons.
23. Liebowitz, J., & Beckman, T. (2020). *Knowledge Organizations: What Every Manager Should Know*. CRC Press.
24. Nawaz, T., Haniffa, R., & Hudaib, M. (2021). On intellectual capital efficiency and shariah governance in Islamic banking business model. *International Journal of Finance & Economics*, 26(3), 3770-3787.
25. Nwokorie, E. (2017). *Challenges to effective management of public sector organizations in an institutionally corrupt society: A study of Nigeria*. Vaasan yliopisto.
26. Ofurum, C. O., Ojo, O., & Oyetunde, T. (2023). Impact of Structural Capital on Financial Performance: Evidence from Nigerian Deposit Money Banks. *International Journal of Economics, Commerce and Management*, 11(2), 56-72.
27. Olatunde, O. J., & Gbenga, O. F. (2020). Human capital on organization performances in banking sector in Nigeria. *International Journal of Management IT and Engineering*, 10(11), 1-24.
28. Otto, H., Pabst, A., & Turner, K. (2020). Customer Satisfaction and Financial Performance: An Empirical Study of the Banking Sector. *Service Industries Journal*, 40(5-6), 330-346.
29. Pereira, V., & Vence, X. (2021). The Role of Management Support in Organizational Effectiveness and Employee Performance. *Journal of Management Studies*, 58(4), 673-694.

30. Rahman, M., & Akhter, S. (2021). The Role of Human Capital in Bank Performance: Evidence from Bangladesh. *Journal of Banking and Finance*, 13(1), 34-50.
31. Rousseeuw, P. J., & Leroy, A. M. (2005). *Robust regression and outlier detection*. John Wiley & sons.
32. Ryu, D., Baek, K. H., & Yoon, J. (2021). Open Innovation with relational capital, technological innovation capital, and international performance in SMEs. *Sustainability*, 13(6), 3418.
33. Sajesh, T. A., & Srinivasan, M. R. (2013). An overview of multiple outliers in multidimensional data. *Sri Lankan Journal of Applied Statistics*, 14(2), 87-120.
34. Secundo, G., Ndou, V., Del Vecchio, P., & De Pascale, G. (2020). Sustainable development, intellectual capital and technology policies: A structured literature review and future research agenda. *Technological Forecasting and Social Change*, 153, 119917.
35. Singh, P., Jain, R., & Kumar, S. (2021). Managerial Support and Organizational Performance: The Moderating Role of Organizational Culture. *Journal of Business Research*, 133, 293-305.
36. Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48, 1273-1296.
37. Ulubeyli, S., & Yorulmaz, R. (2020). The Impact of Structural Capital on Organizational Performance in the Turkish Construction Industry. *Engineering Management Journal*, 32(4), 233-245.
38. Xiao, H., & Yu, D. (2020). Achieving sustainable competitive advantage through intellectual capital and corporate character: the mediating role of innovation. *Problemy Ekorozwoju*, 15(1), 57-66.
39. Xu, J., & Liu, F. (2020). The Impact of Intellectual Capital on Firm Performance: A Modified and Extended VAIC Model. *Journal of Competitiveness*, 12(1), 161.