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Exploring the Impact of Innovation practices, Technologies on the Operational Efficiency of Commercial Banks in Nigeria

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Abstract

In the rapidly evolving financial landscape, innovation has become a critical driver of operational efficiency for commercial banks. This study explores the impact of technological and process innovations on the operational efficiency of commercial banks in Nigeria. It aims to understand how innovative practices and technologies influence cost reduction, service delivery, customer satisfaction, and overall financial performance. Using a straightforward random sampling technique and a descriptive survey design, the study selected 388 participants at random from the 97,026 commercial bank employees in Calabar Metropolis, Cross River State, who make up the entire population. The research employs a mixed-methods approach, combining quantitative data analysis from financial reports of major Nigerian banks with qualitative insights from interviews with banking professionals. The findings indicate that the adoption of digital banking platforms, automated teller machines (ATMs), mobile banking applications, and advanced data analytics significantly enhance operational efficiency. These innovations reduce transaction costs, minimize human error, and improve service speed and reliability. Furthermore, process innovations such as streamlined loan processing and automated compliance checks contribute to more efficient banking operations. The study highlights the high cost of technology implementation, cybersecurity risks, and the need for continuous staff training as the challenges that may hinder innovation to strive. Despite these challenges, the positive impact of innovation on operational efficiency is evident, suggesting that continued investment in innovative technologies and practices is crucial for the competitive advantage and sustainability of commercial banks in Nigeria. The study further recommends that Nigerian commercial banks prioritize technology

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adoption and process improvements to enhance their operational capabilities and meet the dynamic needs of their customers.

Keywords: Innovation, Operational Efficiency, Commercial Banks, Nigeria, Digital Banking, Process Innovation, Financial Performance.

1.0 Introduction:

Nigeria's banking landscape is undergoing tremendous changes, necessitating a strategic approach to human resource management that promotes innovation. The purpose of this article is to investigate the interactions between SHRM variables, with a particular emphasis on innovation, and their effects on the performance of Nigerian commercial banks. Current research in the topic focuses on how human resource management (HRM) can provide strategic value and contribute to organizational performance (Boxall, Purcell, & Wright, 2019). According to this concept, which comes from the private sector, people are a major resource and a critical factor in the overall functioning of any firm. The basic justification for strategic human resource management thought is that integrating HRM with the organization's policies and practices will improve employee management, individual and organizational performance, and success (Farnham, 2019). Human resource management has traditionally focused on personnel issues, but with the changing business climate, human resource management is now focusing on linking people as organizational assets to the firm's business plan (Urlich, 2019). Every firm that wishes to compete effectively must make a strategic decision to address its shortcomings and capitalize on the opportunities provided by its environment, particularly innovation. Nyaema (2009) and Inyang (2002) define strategies as statements developed by an organization to identify its business orientation, as well as patterns of activities, choices, and policies that drive an organization toward a goal or vision. According to Koch, M. J. (2021), effective human resource management necessitates the development of strong human resource management systems within businesses. These systems play a distinct role in employee management, resulting in a competitive advantage. They elaborate on

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how HRM practices lead to positive and effective employee performance by developing well-qualified personnel through a variety of methods that include innovation and technology. The banking industry, like any other commercial organization, strives for a long-term competitive advantage in the marketplace. However, Nigerian commercial banks have been usually hesitant to implement new and modern methods of increasing customer service quality, which is ascribed to their inability to connect human resource plans with organizational strategies (Abenewe et al., 2018). Organizations that fail to create human resource strategies are likely to underperform, and vice versa. According to Hassan (2019), strategic human resource management can lead to a variety of benefits, including the organization's ability to fulfill its goals with minimal resistance, as well as organizational competitiveness, creativity, and innovation among personnel. Nyaema and Wambua (2019) and He and Jing (2018) observed that innovation reinforce, skill leadership, cost management, environmental scanning, strategic human resource planning, strategic hiring and retention, as well as strategic training and development. Strategic staffing and retention, which include deploying workers based on their qualifications and expertise and attempting to keep them through fair salary, working conditions, and career advancement, would not suffice without innovation (Magutu et al., 2021). Human resource innovation is the implementation of new ideas, processes, and technology to better suit the organization's workforce's ever-changing needs. It is not about finding a solution to a changing current condition, but rather about anticipating future demands and circumstances in order to realize the drive. Performance refers to how an organization runs in order to achieve successful outcomes through innovation. Every business must consider the operational and financial effects of performance, which is why it must be defined and linked to pre-established criteria. The phrase "performance" is used to describe the result of a plan to enhance the success determinant. Nonetheless, an autonomous workforce assessed both statistically and qualitatively (financial, non-financial, and operationally) is entirely necessary for performance. Consequently, in the context of the commercial banking sector, performance refers to excellence and encompasses profitability and productivity in addition to

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other non-cost elements like quality, speed, delivery, and flexibility. Maximizing current and future financial and operational performance is one of organizational management's most important goals (Kisaka et al., 2014). Every firm is built on the foundation of operational efficiency. It describes the level of expertise with which different company functions are performed. It is a comparison of a business's inputs and outputs. This research aims to investigate the relationship between innovation and the success of the commercial banking sector.

2.0 Literature Review:

Hamid et al., (2012) draw attention to how important innovation is to the success of organizations. Nonetheless, little study has been done on the relationship between innovation in the banking industry and strategy human resource management (SHRM) factors. By shedding light on the ways in which strategic human resource (HR) practices can foster an innovative culture, this study closes the knowledge gap. Innovation is defined as a concept or item that a person or organization believes to be novel. The degree to which the notion is novel from the perspective of the individual impacts how that person will respond to it. A concept is innovative if it seems novel to the individual. An innovation is a technical understanding of how to perform something more effectively than the current state of the art. (Rogers, 2015). Because of this, an important factor in an organization's performance is its level of innovativeness, which is related to its ability to innovate i.e., to introduce new ideas, products, or processes into the market and organization Hult, (2004). Javaola, (2006) Innovation orientation aids businesses in their quest for novel offerings that might meet the wants of their clientele. This is because it is a crucial factor in effectively matching customer needs with a quality offering, which may propel a company's success. According to Lisbon, Skarmeas, & Lages (2011), innovation has a substantial positive impact on a company's performance by helping it keep or grow its market share and outperform rivals. There exist numerous instances in which the banking industry innovates by showcasing its current products to clients in novel ways. Banks can significantly boost their competitiveness by improving their current product offerings. According to Omondi et al., (2019), inadequate planning on HR-related matters, inadequate communication and decision-

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making procedures, and inadequate job orientations which include a deficiency of substantial attempts to establish precise expectations regarding the necessary work behaviors of the new hires are the factors that impact the adoption of strategic HRM practices by Kenyan commercial banks.

According to Orji et al., (2022), comprehensive training, empowerment, performance-based compensation, and service quality are all significantly correlated. Tulsian, (2013) examined the benefits of technology innovation for people, time, and work, with the end outcomes being increased customer base, profits, productivity, and high-quality service delivery. A bank's or other business organization's operating power is the utmost output that can be obtained from the applied inputs. While technical innovation plays a significant role in creating innovative work processes that enhance productivity and quality, operational competence is a vital factor in achieving business excellence.

Numerous research works have examined strategic HRM methods; however, very few, if any, have examined how strategic HRM variables innovation affect the operational efficiency commercial banks in Nigeria's performance management. By examining the effects of innovation on operational efficiency of commercial banks in Nigeria, this study aims to bridge that gap and contribute to the body of work in this area.

3.0 Methodology:

Using a mixed-methods approach, this study examines financial performance data quantitatively and qualitatively by conducting surveys and interviews with HR professionals working for Nigerian commercial banks. A thorough grasp of the relationship between innovation and operational efficiency, with organizational culture serving as the mediating variable, will be obtained through data triangulation.

3.1 Method of data collection

Self-administered questionnaires on the observations, opinions, and viewpoints of a subset of the staff about how innovative practices and technologies influence cost reduction, service delivery, customer satisfaction, and overall financial performance under investigation were used to gather primary data. Because of the technical nature of the scale's components and the requirement to guarantee the respondents'

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responses were reliable, this approach was preferred. To collect data on different study aspects, the questionnaire was segmented into sections. The respondents' demographics, operating efficiency (cost reduction, service delivery, customer satisfaction, and overall financial performance) as the dependent variable, organizational culture as the moderating variable, and the innovation practices and technologies, as independent variables.

We treat innovation practices and technologies as the independent variable, operating efficiency (cost reduction, service delivery, customer satisfaction, and overall financial performance) as the dependent variable, and organizational culture as the moderating variable in this research paper. With the assistance of certified research assistants, the respondents were asked to complete a 5-point Likert scale questionnaire for the study.

3.2 Sample size determination

The sample size was determined using Taro Yamen's formula below. The estimation procedure is as follows:

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

Eqn. 1

Where:

n = Sample size

N = Finite population

e = Level of significance at 0.05 or 5%

I = Constant

97,026/1+0.0025*97026 = 97026/243.565= 398

This means that 398 employees of commercial banks and study participants make up the sample size. The 13 commercial banks in this study were chosen using a simple random sampling method called ballooning. Based on the number of branches in Calabar Metropolis, as indicated in Table 1, the sampling banks were chosen. Organizational culture serves as a critical mediating variable for various aspects of operating efficiency in commercial bank.

TABLE 1: Banks, population and sample size

Table 1 below lists a few chosen banks along with the number of branches, employees, and sample size in Calabar Metropolis for each bank

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	Selected banks	No. of branches	Population	Sample size
1	Fidelity Bank	2	5544	22
2	FCMB	3	8316	34
3	GTB	3	8316	34
4	First Bank	6	16638	66
5	Access Bank	3	8316	34
6	Union Bank	3	8316	34
7	UBA	4	11088	44
8	Zenith Bank	4	11088	44
9	Ecobank	3	8316	34
10	Citibank	1	2772	13
11	Heritage Bank	1	2772	13
12	Keystone Bank	1	2772	13
13	Polaris Bank	1	2772	13
	TOTAL	35	97026	398

Innovation: A culture that fosters innovation encourages employees to think creatively, take calculated risks, and explore new ideas. Banks with a culture of innovation are more likely to invest in research and development, experiment with new products and services, and adapt to changing market dynamics. This leads to the development of innovative solutions that improve operational processes, enhance customer satisfaction, and drive competitive advantage. **Technology Adoption:** Organizational culture significantly influences the adoption of new technologies within banks. A culture that values technological advancement encourages employees to embrace new tools and systems, facilitates the implementation of efficient digital processes, and promotes collaboration across different departments. Banks with a culture of technological innovation are better positioned to leverage emerging technologies such as artificial intelligence, blockchain, and data analytics to streamline operations, enhance security, and deliver superior digital banking experiences to customers.

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Cost Reduction: A culture that values efficiency encourages employees to seek and implement cost-saving measures, such as process optimization and waste reduction e.g. automation of routine tasks (e.g., data entry, transaction processing) reduces the need for manual labor, leading to lower staffing costs. Automated systems minimize human error, reducing costs associated with corrections and compliance breaches. Organizational Cultures that promote innovation can lead to the adoption of new technologies and methodologies that streamline operations and reduce costs as seen in digital banking channels (online and mobile banking) reduce the need for physical branches, lowering overhead costs such as rent, utilities, and maintenance. Digital transactions reduce the need for paper, postage, and physical storage, leading to significant cost savings.

Service Delivery: Digital banking platforms and ATMs provide customers with round-the-clock access to banking services, improving convenience and service availability. Innovations like instant payment systems enable real-time transactions, enhancing the speed of service delivery. Advanced data analytics allow banks to tailor services to individual customer needs, offering personalized financial advice and products. AI-powered chatbots provide immediate customer support, resolving queries efficiently and freeing human staff for more complex issues

Innovation and organizational cultures have foster collaboration across departments to ensure that customer service issues are addressed holistically and promptly with clear and open communication channels for quick dissemination of information and coordinated efforts in service delivery.

Customer Satisfaction: Modern banking apps and websites with user-friendly interfaces improve customer experience, making banking more accessible and enjoyable. Seamless integration across multiple channels (mobile, online, in-branch) ensures a consistent and convenient customer experience. Innovations in cybersecurity (e.g., biometrics, encryption, two-factor authentication) enhance customer trust by protecting sensitive information. Digital tools that offer customers better control over their accounts (e.g., spending trackers, instant notifications) increase satisfaction by promoting transparency and financial management. Cultures that value customer feedback use it to continuously improve

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products and services, leading to increased satisfaction.

Financial Performance: Innovative financial products and services (e.g., mobile wallets, digital loans) open new revenue streams and attract a broader customer base. Data-driven insights enable targeted marketing, leading to increased cross-selling and upselling opportunities.

Cultures that align organizational goals with financial performance objectives ensure that every employee understands and contributes to the company's financial health. A culture that values data-driven decision-making uses performance metrics to guide actions and improve financial outcomes. A culture of integrity and ethics prevents financial losses due to fraud and compliance issues, safeguarding the company's financial performance.

Operational Efficiency: Innovations that reduce operational costs and increase efficiency improve the cost-to-income ratio, a key indicator of financial performance. Advanced analytics and AI improve risk assessment and management, leading to better asset quality and reduced loan defaults. Organizational culture is a foundational element that impacts cost reduction, service delivery, customer satisfaction, and financial performance. By fostering a culture of efficiency, customer-centricity, collaboration, and strategic alignment, organizations can achieve significant improvements in these areas. Companies that recognize and cultivate a positive and productive organizational culture are better positioned to succeed in today's competitive business environment.

summary, organizational culture acts as a mediating variable that influences the extent to which commercial banks can effectively leverage innovation, new technology, initiatives to enhance their operating efficiency and competitive position in the market. A supportive culture that values continuous improvement, collaboration, and adaptability is essential for driving sustainable growth and success in today's dynamic banking landscape.

Test of reliability

A reliability test employing the Cronbach Alpha formula was conducted to ascertain the consistency of the data instrument in order to guarantee its stability and consistency, as seen below:

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$$\alpha = \frac{K\underline{c}}{[\underline{V}+(K-1)\underline{c}]}$$

Eqn. 2

Where

α = Alpha

k = Number of items

$\bar{c}$ = The average of covariance among the items

$\bar{v}$ = The average variance of each item

A reliability test yielded a Cronbach Alpha of 0.70, certifying the research instrument reliable. Trial testing on thirty employees of three carefully chosen microfinance banks (Calabar, Ekondo, and First Royal Microfinance banks) in Calabar, Cross River State, using a judgmental sample technique, validated the research instrument's reliability. The Cronbach Alpha reliability index was estimated using the respondents' data. Given that the r-value falls between 0.82 and higher, the instrument was regarded as dependable. The results of the Cronbach Alpha reliability test are displayed in Table 2

TABLE 2

Reliability estimates

S/N	Variables	No. of items	Cronbach Values
1	Innovation practices	5	0.82
2	Technologies	5	0.84
3	Operational efficiency	5	0.87

Source: (*Otosi 2022*)

Analytical techniques

Both descriptive and inferential statistical methods were applied to the data. To ascertain the frequency and proportions of the variables, descriptive analysis was employed, as seen in Faithpraise et al., (2019) and Faithpraise et al., (2022) illustrations. Frequencies and percentages are used in the descriptive statistics for the biodata. The findings were displayed as tables for ease of comprehension and interpretation, and the hypotheses were examined using multiple linear regression and hierarchical analysis, as shown in Okon et al. (2021), to ascertain the degree to which each component of the

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independent variable influences the dependent variable, coefficient, and p-value.

3.4 Data presentation and interpretation

TABLE 3

Administration and return of questionnaire

S/N	Option	Frequency	Percentage
1	Number of questionnaires completed and returned	393	98.87
2	Number of questionnaire not returned/discarded	05	1.13
	Total	398	100

Source: Field Survey, 2022

Table 3 revealed that 98.87 per cent of (398) copies of questionnaire administered were duly completed and returned administered. On the other hand, 1.13 per cent copies of questionnaire were not returned. Therefore, analysis of this study was based on 393 returned copies of questionnaire.

4.0 Results

TABLE 4

Demographic representation of the respondents

Demographic	Total	Percentage (%)
Gender		
Male	214	54.5
Female	179	45.5
Total	393	100.0
Age		
18-25	108	27.5
26-35	73	18.6

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36-45	70	17.8
46-55	71	18.1
56 and above	71	18.1
Total	393	100.0
Marital status		
Single	145	36.9
Married	214	54.45
Divorced	14	3.56
Widow/Widower	20	5.09
Total	393	100.0
Educational qualification		
Diploma/NCE	52	13.23
B. Sc/HND	161	40.97
Master's	130	33.08
Ph.D.	30	7.63
Others	20	5.09
Total	393	100.0

Source: (Otosi, 2022)

According to Table 4's demographic profile, there were 214 male respondents, or 54.5 percent, and 179 female respondents, or 45.5%. Regarding the age range, the data showed that 108 respondents, or 27.5%, were between the ages of 18 and 25, 73 respondents, or 18.6%, were between the ages of 26 and 35, 70 respondents, or 17.8%, 71 respondents, or 18.1%, were between the ages of 46 and 45, and 71 respondents, or 18.1%, were between the ages of 56 and above. According to their marital status, 145 respondents, or 36.9% of the sample, were single, 214 respondents, or 54.45% of the sample, were married, 14 respondents, or 3.56% of the sample, were divorced, and 20

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respondents, or 5.09 percent of the sample, were widows or widowers. Based on their educational background, 52 respondents, or 13.23% of the sample, got a diploma or NCE. A total of 161 respondents, or 40.97 percent, held a B.Sc. or HND; 130 respondents, or 33.08 percent, had a master's degree; 30 respondents, or 7.63 percent, held a Ph.D.; and 20 respondents, or 5.09 percent, held any other type of educational qualification.

TABLE 5

Correlations

		Innovation	New Tech.	Org. cult.	Operational efficiency
Innovation practices	Pearson Correlation	1	.683**	.357**	.388**
	Sig. (2-tailed)		.000	.000	.000
	N	393	393	393	393
Technologies	Pearson Correlation	.683**	1	.591**	.530**
	Sig. (2-tailed)	.000		.000	.000
	N	393	393	393	393
Org. cult	Pearson Correlation	.357**	.591**	1	.581**
	Sig. (2-tailed)	.000	.000		.000
	N	393	393	393	393
Operational Eff.	Pearson Correlation	.388**	.530**	.581**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	393	393	393	393

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

TABLE 6

Descriptive Statistics

	Innovation	NT	Org cult	Operational eff.	Valid N (listwise)

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N	Statistic	393	393	393	393	393
Minimum	Statistic	4	4	4.0	4	
Maximum	Statistic	15	15	16.0	16	
Mean	Statistic	13.60	14.39	14.214	13.94	
Std. Deviation	Statistic	1.614	1.575	2.5010	2.211	
Skewness	Statistic	-3.434	-4.705	-1.916	-1.767	
	Std. Error	.123	.123	.123	.123	
Kurtosis	Statistic	15.525	24.990	3.320	4.650	
	Std. Error	.246	.246	.246	.246	

4.1 Tests of hypotheses

The null version of the following theories was expressed.

H0: The operational effectiveness of commercial banks in Nigeria is not significantly correlated with innovation practices, technologies.

H1: The operational effectiveness of commercial banks in Nigeria is significantly correlated with innovation practices, technologies.

TABLE 7

Model Summary showing the relationship between Innovation practices, Technologies, and Operational efficiency

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926a	.858	.856	.88595

a. Predictors: (Constant), Innovation practices, Technologies.

TABLE 8

Analysis of variance (ANOVA) for the relationship between Innovation practices, Technologies and Operational efficiency

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Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1835.960	4	458.990	584.770	.000[b]
	Residual	304.544	388	.785		
	Total	2140.504	392			

a. Dependent Variable: Operational Efficiency

b. Predictors: (Constant), Innovation practices, Technologies.

TABLE 9

Coefficients for the relationship between Innovation practices, Technologies and Operational efficiency

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.476	.516		8.673	.000
	Innovation practices	-.186	.032	-.151	-5.897	.000
	Technologies	.906	.090	.645	10.100	.000

a. Dependent Variable: Operational Efficiency

The capacity of Innovation practices, technologies to affect operational efficiency is demonstrated by the regression tables (Tables 7, 8 and 9) above. The model summary, Table 7, shows that there is a 92.6% correlation between the variables (as indicated by the R column). According to the modified R square value of .856, Innovation practices, technologies can account for as much as 85.6% of operational efficiency.

The f-test (584.770, P<0.001) of the relationship in Table 8 indicates that, the overall prediction of the independent variables to the dependent variable is statistically significant, therefore, the regression model is a good fit for the data and provides, sufficient evidence to conclude that the strategic human resource management variables Innovation practices, Technologies

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affect operational efficiency of commercial banks in Nigeria.

Table 9 is the coefficients table, which provides the necessary information on the ability of each of the strategic human resource management variables to predict operational efficiency in the selected commercial banks. This revealed the individual contributions of each variable to the model

The relationship in Table 8 f-test (584.770, P<0.001) shows that the independent variables' overall prediction is statistically significant. As a result, the regression model fits the data well and offers enough proof to draw the conclusion that Innovation practices, Technologies have an impact on the operational efficiency of Nigeria's commercial banks.

The coefficients table, found in Table 9, offers the essential details regarding each strategic HRM variable's capacity to forecast operational efficiency in the chosen commercial banks. This demonstrated the unique roles that every variable played in the model.

This is evident from the fact that all four variables have P-values less than.005. The standardized beta coefficients for Innovation practices -.151 associated with t-value of -5.897 and p<.005, Technologies is.645, and the t-value is 10.100, with P=.005

5.0 Discussion of findings

Effect of innovation on operational efficiency:

According to the first hypothesis result, innovation and the related variables have a major impact on how well commercial banks perform in terms of operational efficiency. This finding suggests that, in the commercial bank sector, innovativeness is a useful strategic instrument for human resource management. This outcome is consistent with Rogers' (2015) research, which found that people may view any novel concept as innovation, particularly if it benefits an organization and feels novel to them.

A technological understanding of how to accomplish tasks more effectively than the current state of the art constitutes an innovation. According to Jaakola (2006), human resource management will always require those creative concepts. For this reason, a company's ability to introduce new ideas, procedures, or products into the business should be viewed as a crucial element of its success.

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(Hult, 2004). According to Hult's, innovation can significantly affect an organization's operational efficiency in the following ways:

The introduction of new technologies, approaches, or best practices that simplify operations, eliminate bottlenecks, and enhance workflow generally results from innovations. These processes are then identified and put into place.

By automating repetitive operations, reducing errors, and speeding up processes, the incorporation of cutting-edge technologies like automation, artificial intelligence, and machine learning may greatly improve operational efficiency.

Organizations are able to collect, analyze, and understand data more efficiently because of the advancements in business intelligence and analytics. Ultimately, by utilizing a data-driven strategy, operational efficiency is increased through improved decision-making, resource allocation, and performance monitoring.

Collaboration and information exchange among team members are made easier by cutting-edge communication and collaboration solutions. Improving communication makes decisions more quickly, lessens information gap, miscommunication, and fosters an environment where people work more productively through free flow of information and vivid communication.

The ability to quickly adjust to shifting internal needs or external market conditions is one way that innovation fosters organizational agility. Its adaptability enables businesses to quickly modify their operations, maintaining their effectiveness and ability to respond to changing demands.

Products or services that better match customer expectations are developed as a result of innovations that prioritize comprehending and satisfying customer wants.

Operational efficiency results in a business may benefit from higher client satisfaction and loyalty. Increased operational efficiency can be seen in immediate cost reduction whether through supply chain management, energy-efficient technologies, or process automation.

Innovation impact can be felt on reducing operating expenses and maximizing resource usage as well as increase output.

Innovations will always provide workers with improved equipment, instruction, and resources. This entail implementing new

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software, instructional plans, or teamwork tools that facilitate task management and raise worker productivity levels.

Businesses that regularly innovate tend to have a competitive advantage in the marketplace. This advantage increases market share and overall operational efficiency through enhanced customer experiences, enhanced processes, or differentiated products. Innovation is critical to increasing operational efficiency because it can streamline procedures, make better use of technology, enhance communication, encourage adaptability, and ultimately position the company to prosper in a changing business climate.

As previously said, innovation can have a major positive impact on an organization's operational efficiency and produce a number of other beneficial effects.

6.0 Conclusion

The attainment of success by Nigerian banks is significantly dependent on strategic human resource management.

The study suggests that Innovation practices, Technologies all have an impact on the operational efficiency of commercial banks. It's also important to remember that, in commercial banks, organization culture is crucial to attaining peak performance. Therefore, the results highlight how crucial it is for commercial banks to properly and more intently focus on developing and putting into practice powerful strategic in order to enhance and sustain success.

6.1 Recommendations

The following recommendations were made after careful study of the research findings:

1. In order to attain operational efficiency, human resource managers at banks should constantly strive to implement innovative techniques for training and retraining employees, with the goal of dispelling the arcade mentality among staff members.
2. To assess how well human resource management contributes to organizational profitability, human resource managers at banks should place a strong emphasis on the evaluation of new technologies.
3. Human resource managers should require their staff to have a variety of talents in order to satisfy clients.
4. Managers should always engage in risk management to find new opportunities and discuss potential concerns that could compromise the provision of high-quality services.

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5. In order to attain great organizational performance, human resource managers at banks should always ensure that organizational culture is regarded as a standard that all workers must adhere to.

6.2 Contribution to knowledge

Review of empirical studies emphasized on the traditional variables of strategic human resources like recruitment, selection, motivation, compensation, training and development as items of independent variables. meanwhile, the present study used Innovation practices, technologies as proxies of the independent variables. On this note therefore, proxies of the present study are contribution to knowledge

6.3. Suggestions for further research

Since this study focused on commercial banks as a service industry, it is suggested that further studies should be carried out in goods industry with different independent sub-variables.

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