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DIGITAL TRANSFORMATION ON ORGANISATIONAL PERFORMANCE IN SELECTED DEPOSIT MONEY BANKS IN ABEOKUTA, OGUN STATE, NIGERIA

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ABSTRACT

The study investigates the impact of digital transformation on organizational performance within selected deposit money banks in Abeokuta, Ogun State, Nigeria. The research aims to analyze how IT infrastructure, digital skills, and automation influence operational efficiency, customer patronage, and profitability in this sector. Utilizing a descriptive survey research design, primary data was collected through structured questionnaires administered to employees across four banks, selected to represent a diverse workforce. A total of 141 respondents were sampled using a proportionate stratified random sampling technique to ensure an unbiased representation. The analysis revealed significant findings: IT infrastructure explains 73.3% of the variation in operational efficiency, digital skills account for 71.0% of the variation in customer patronage, and automation impacts profitability by 69.1%. Each hypothesis was tested using regression analysis, leading to the rejection of the null hypotheses, indicating that IT infrastructure, digital skills, and automation all positively influence the respective performance outcomes. The findings underscore the critical role of digital transformation in the banking sector, suggesting that continuous investment in technology infrastructure, employee digital competency training, and expanded automation practices are essential for enhancing operational efficiency, customer service, and overall profitability. This research contributes to the understanding of how digital innovations can drive performance in the Nigerian banking landscape and offers practical recommendations for banks to thrive in an increasingly digital marketplace.

KEYWORDS: Digital Transformation, Organizational Performance, IT Infrastructure, Digital Skills, Automation, Operational Efficiency.

INTRODUCTION

Organisational performance is a primary determinant of a firm's market relevance, sustainability, and strategic competitiveness, particularly in the banking industry where customer expectations, regulatory compliance, and technological advancements converge at a fast pace (Oluwafemi & Ogunleye, 2021; Nwachukwu & Yusuf, 2023). Performance in this context refers not only to financial metrics such as profitability and return on investment, but also includes efficiency, customer patronage, service quality, and innovation capability (Adebayo & Hassan, 2022; Ojo & Adebanjo, 2024). In a hyper-competitive environment, banks are increasingly required to deliver services that are faster, more secure, and customer-

focused while ensuring internal cost-effectiveness and long-term viability (Okeke & Salisu, 2019).

Recent global shifts have pushed digital transformation to the forefront of organisational performance strategies, especially within financial institutions. Digital transformation encompasses the comprehensive integration of digital technologies into every area of business operations, fundamentally altering how organisations operate and deliver value to customers (Afolabi & Musa, 2023; Bello & Ibrahim, 2021). Through improved IT infrastructure, automated systems, and digitally skilled personnel, organisations can enhance operational efficiency, strengthen customer engagement, and drive sustained profitability (Taiwo & Yusuf, 2020; Eze & Balogun, 2022). In the banking sector, this has manifested in mobile banking apps, cloud-based services, digital customer onboarding, biometric authentication, and artificial intelligence-enabled customer support (Oladipo & Salami, 2021; Chukwuma & Lawal, 2023).

In recent years, deposit money banks operating in Abeokuta have deployed various digital initiatives to improve service delivery, retain customers, and enhance financial performance. However, the extent to which these efforts have improved key organisational performance indicators such as efficiency, customer patronage, and profitability remains under-examined.

Given the widespread emphasis on digital transformation, many deposit money banks in Nigeria continue to report inconsistent organisational performance outcomes, particularly in semi-urban regions like Abeokuta (Oladipo & Lawal, 2023; Salisu & Nwachukwu, 2024). Some banks have made significant investments in IT infrastructure and automation, yet continue to struggle with service inefficiencies, customer attrition, and declining profit margins (Taiwo & Okonkwo, 2020; Bello & Adebanjo, 2022). While digital tools are being implemented, challenges persist in achieving seamless integration, aligning staff with new systems, and ensuring that digital transformation initiatives are performance-driven (Afolabi & Salami, 2024; Musa & Ojo, 2021). Moreover, disparities in digital skill levels among staff often hinder the optimal utilisation of digital platforms, leading to suboptimal customer experiences and workflow disruptions (Abiola & Ibrahim, 2023; Ogunleye & Hassan, 2020). In many cases, banking operations still rely on hybrid processes where manual and digital systems coexist inefficiently.

Without empirical data from cities like Abeokuta, bank executives risk relying on generic transformation models that fail to address the specific operational, cultural, and infrastructural dynamics of their branches. This study aims to fill this gap by investigating how IT infrastructure, digital skills, and automation affect organisational performance measured in terms of efficiency, customer patronage, and profitability in selected deposit money banks operating in Abeokuta, Ogun State.

Objectives of the Study

The primary objective of this study is to examine the effect of digital transformation on organisational performance in selected deposit money banks in Abeokuta, Ogun State, Nigeria.

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The specific objectives of the study are to:

i. assess the effect of IT infrastructure on operational efficiency in selected deposit money banks in Abeokuta.

ii. evaluate the impact of digital skills on customer patronage in selected deposit money banks in Abeokuta.

iii. determine the effect of automation on profitability in selected deposit money banks in Abeokuta.

Research Questions

This study seeks to answer the following research questions:

i. How does IT infrastructure influence operational efficiency in selected deposit money banks in Abeokuta?

ii. What is the effect of digital skills on customer patronage in selected deposit money banks in Abeokuta?

iii. How does automation affect profitability in selected deposit money banks in Abeokuta?

iv.

Research Hypotheses

The following null hypotheses have been formulated to guide this study:

H_1: IT infrastructure does not significantly affect operational efficiency in selected deposit money banks in Abeokuta.

H_2: Digital skills do not significantly influence customer patronage in selected deposit money banks in Abeokuta.

H_3: Automation does not significantly affect profitability in selected deposit money banks in Abeokuta.

Scope of the Study

This study is geographically confined to Ogun State, Nigeria, with a particular focus on selected deposit money banks operating within the city of Abeokuta. As the capital of Ogun State and a key commercial centre, Abeokuta hosts several branches of major Nigerian banks and represents a strategic location for examining the effects of digital transformation within the financial sector. The city's diverse economy encompassing public service, commerce, education, and industry provides a suitable context for evaluating how digital innovations influence banking operations and organisational performance.

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More so, the study is limited to three core dimensions of digital transformation which are IT infrastructure, digital skills, and automation. These are assessed in relation to three critical indicators of organisational performance: operational efficiency, customer patronage, and profitability. These variables are derived from established models and frameworks that analyse how digital tools and strategies contribute to business outcomes. The research investigates how specific digital transformation initiatives such as improved network systems, employee digital competencies, and automated banking processes translate into tangible performance improvements in bank branches.

LITERATURE REVIEW

Conceptual Review

Digital Transformation

Digital transformation refers to the strategic integration of digital technologies into core business operations, aimed at enhancing efficiency, innovation, and customer experience (Ojo & Adebanjo, 2022). It goes beyond simply digitising existing processes, involving fundamental changes in organisational culture, structures, and service delivery models (Adebayo & Salisu, 2021). In the banking sector, digital transformation represents a paradigm shift in how financial institutions interact with customers, manage internal workflows, and compete in a dynamic market (Fadeyi & Musa, 2023). It typically encompasses IT infrastructure upgrades, automation of processes, enhancement of employee digital skills, and the deployment of customer-facing technologies (Oladipo & Hassan, 2024).

The benefits of digital transformation are numerous. First, it improves operational speed and accuracy, allowing organisations to process transactions, respond to queries, and generate insights more efficiently (Okonkwo & Lawal, 2020). Secondly, it enhances customer engagement through personalised digital services such as mobile apps, online portals, and AI-driven chatbots (Chijioke & Ibrahim, 2023). Additionally, digital transformation supports strategic agility, enabling organisations to quickly adapt to market trends, regulatory changes, or global disruptions (Taiwo & Eze, 2022). In banks, this could mean faster loan approvals, seamless onboarding, and real-time analytics for decision-making (Ajayi & Yusuf, 2021).

1. IT Infrastructure

IT infrastructure refers to the integrated hardware, software, network systems, data centres, and cloud platforms that support the digital operations of an organisation (Okafor & Musa, 2020). In the context of digital transformation, it represents the backbone upon which applications, services, and user interactions are built and maintained (Ibrahim & Salisu, 2022). A well-developed IT infrastructure enables organisations to automate processes, manage information flows, secure data, and deploy digital services at scale (Chukwuma & Hassan, 2023). In banking, core banking systems, encrypted databases, digital payment gateways, and cybersecurity frameworks all constitute vital components of IT infrastructure (Yusuf & Adeyemi, 2021).

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2. Digital Skills

Digital skills encompass the knowledge, competencies, and capabilities that employees require to effectively use digital tools, platforms, and systems in the workplace (Oladipo & Balogun, 2021). These skills range from basic computer literacy and internet navigation to more advanced abilities such as data analytics, cybersecurity awareness, and proficiency in enterprise software (Abiola & Hassan, 2024). In digitally transforming organisations, employees with strong digital skills are essential to ensure that investments in technology translate into improved performance and service delivery (Chijioke & Salisu, 2020). In banking, these skills enable staff to manage digital transactions, resolve technical issues, and support customers using mobile and online platforms (Ajayi & Okeke, 2023).

The benefits of developing digital skills within the workforce are significant. Employees become more agile, adaptive, and capable of leveraging technology to solve problems, streamline processes, and enhance customer satisfaction (Fadeyi & Ibrahim, 2019). A digitally competent workforce is also more resilient in the face of disruptions, able to shift seamlessly between physical and virtual service channels (Okafor & Eze, 2022). Moreover, digital upskilling contributes to employee engagement and career development, as staff gain confidence in navigating the digital workplace (Bello & Nnaji, 2021).

3. Automation

Automation refers to the application of technology to perform tasks with minimal or no human intervention, particularly repetitive and rule-based processes (Okonkwo & Taiwo, 2022). In banking, automation covers a range of activities including transaction processing, customer verification, account reconciliation, fraud detection, and loan approvals (Bello & Adebanjo, 2021). It encompasses tools such as robotic process automation (RPA), artificial intelligence (AI), chatbots, and workflow management systems that streamline banking operations (Ajibade & Salisu, 2023). Automation is a core component of digital transformation, enabling banks to deliver faster, more accurate, and scalable services (Olawale & Ibrahim, 2020).

Organisational Performance

Organisational performance refers to the extent to which a firm achieves its predefined goals in areas such as operational efficiency, customer satisfaction, market growth, and profitability (Oladipo & Musa, 2023). It reflects how well an organisation utilises its resources such as human, technological, and financial to create value for stakeholders (Ibrahim & Adeyemi, 2021). In the banking sector, performance encompasses various dimensions including service delivery speed, customer retention, innovation, risk management, and regulatory compliance (Ajayi & Salisu, 2022). As organisations embrace digital transformation, performance metrics have increasingly expanded to include digital engagement, system uptime, and digital customer experience (Okeke & Hassan, 2024).

A key benefit of monitoring and improving organisational performance is the ability to drive strategic decision-making. Performance data informs leaders on areas of strength and

weakness, enabling proactive adjustments to business strategies (Eze & Balogun, 2020). Strong performance outcomes enhance stakeholder confidence, attract investment, and foster employee commitment (Taiwo & Aluko, 2022). In banking, high-performing institutions often report stronger customer loyalty, improved brand reputation, and consistent regulatory compliance, all of which are vital in today's competitive landscape (Nwachukwu & Okonkwo, 2023).

Nonetheless, achieving optimal organisational performance presents challenges. Misalignment between organisational strategy and operational execution can hinder performance despite significant resource investment (Ojo & Yusuf, 2021). External factors such as economic instability, regulatory changes, or technological disruptions may also impact performance unpredictably (Adebayo & Ibrahim, 2019). Additionally, over-reliance on traditional metrics may lead organisations to overlook emerging performance indicators such as digital service quality, cybersecurity resilience, and employee digital adaptability (Fadeyi & Adebanjo, 2024).

To improve performance sustainably, organisations must adopt integrated performance frameworks that incorporate both financial and non-financial metrics (Okafor & Bello, 2023). These should align with the organisation's strategic goals and reflect evolving market realities. In banking, leveraging digital transformation tools such as analytics, automation, and digital feedback loops can enhance real-time performance monitoring and enable rapid course correction when necessary (Abiola & Hassan, 2024).

Theoretical Review

This study is anchored on two complementary theories: the Technology-Organization-Environment (TOE) Framework and the Resource-Based View (RBV).

Technology-Organization-Environment (TOE) Framework

The Technology-Organization-Environment (TOE) framework, introduced by Tornatzky and Fleischer in 1990, explains how technological innovation adoption is shaped by three interconnected elements: technological readiness, organisational capabilities, and external environmental factors (Olalekan & Yusuf, 2020). In essence, it posits that organisations adopt digital innovations not only based on the features of the technology itself, but also on internal structures, cultural readiness, and pressures from industry dynamics or regulatory environments (Adebayo & Musa, 2022). The framework has been widely applied in the study of digital transformation, particularly in understanding the conditions under which technology adoption leads to improved performance (Okonkwo & Ibrahim, 2021).

The technological component refers to the internal and external technologies relevant to the firm, including IT infrastructure, digital platforms, and automation tools (Chijioke & Balogun, 2023). The organisational element comprises leadership style, employee competence, size, and internal processes that influence how effectively technology is deployed (Taiwo & Adebanjo, 2021). The environmental context includes competitive pressure, customer expectations, economic conditions, and government regulations—all of which can accelerate or delay digital

transformation (Fadeyi & Nnaji, 2020). In banking, for example, Central Bank of Nigeria (CBN) policies on digital banking and cybersecurity shape how institutions implement digital strategies.

Resource-Based View (RBV)

The Resource-Based View (RBV) of the firm, initially proposed by Barney (1991), posits that an organisation's competitive advantage and performance are largely determined by the internal resources it controls especially those that are valuable, rare, inimitable, and non-substitutable (VRIN) (Ibrahim & Oladipo, 2023). According to this perspective, firms that possess and effectively deploy strategic resources such as advanced digital infrastructure, skilled personnel, and organisational knowledge are better positioned to achieve superior performance (Ogunleye & Taiwo, 2022). RBV is particularly relevant in digital transformation contexts, where the ability to acquire, integrate, and leverage technology can differentiate high-performing banks from their peers.

Under this framework, digital assets such as IT infrastructure and software systems are seen as enabling tools, but their performance impact depends on the organisation's ability to align them with human and structural capabilities (Adebayo & Hassan, 2021). For example, a bank may invest in cutting-edge automation systems, but without skilled personnel to manage and interpret the outputs, such technology cannot deliver its intended value (Okafor & Musa, 2020). RBV highlights the strategic importance of not just acquiring digital tools, but developing internal competencies such as digital literacy, data analytics capacity, and innovation culture that convert these tools into tangible performance gains (Bello & Nwachukwu, 2024).

Empirical Review

This section reviews empirical studies that examine the relationship between dimensions of digital transformation and key organisational performance indicators within service-oriented institutions, particularly in the Nigerian banking sector.

Empirical research highlights a strong link between IT infrastructure and service delivery efficiency in the banking sector. In a study on Nigerian commercial banks, Ibrahim and Taiwo (2023) found that institutions with well-integrated IT systems recorded faster transaction processing times and reduced customer wait periods. Similarly, Bello and Hassan (2021) reported that IT-enabled platforms such as core banking systems and secure internet banking portals improved staff productivity and operational turnaround in high-volume branches.

Ajibade and Salisu (2022) observed that real-time banking systems enhanced branch interoperability, which allowed customers to initiate and complete transactions across multiple locations without delay. This infrastructure-driven fluidity significantly contributed to process efficiency and customer satisfaction. In a cross-regional study, Afolabi and Musa (2020) compared urban and rural banks and found that branches with more developed IT infrastructure were 31% more efficient in handling account-related services.

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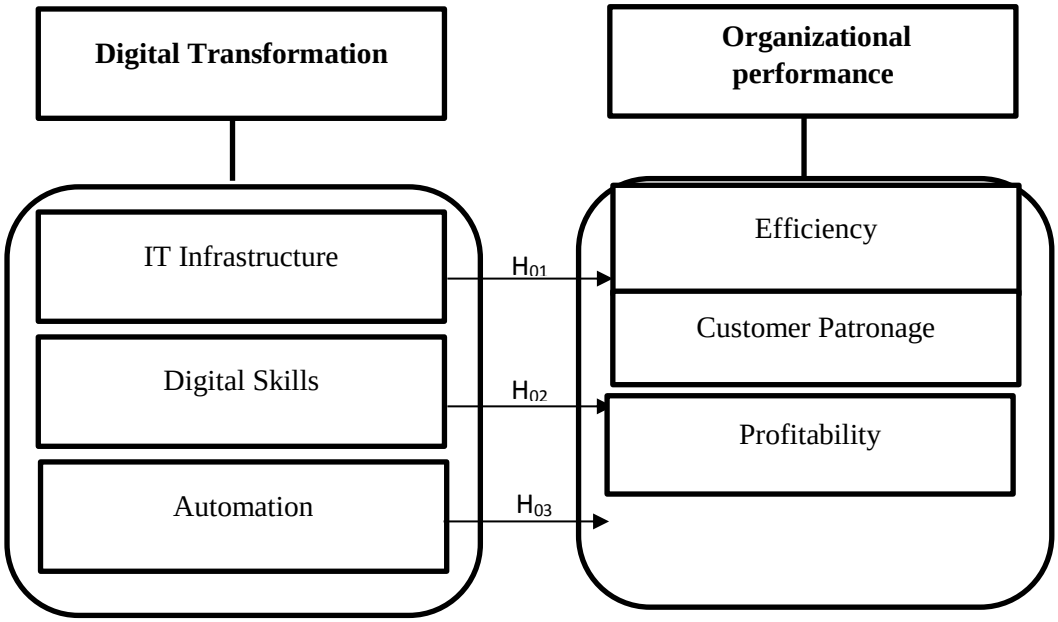
Chukwuma and Hassan (2022) reported that banks that invested in periodic upskilling programs retained a higher percentage of tech-savvy customers who preferred contactless banking solutions. In addition, Olowu and Adeyemi (2023) found that frontline staff trained in digital etiquette, cybersecurity, and online dispute resolution facilitated smoother customer experiences and higher repeat usage of digital platforms.

Adebanjo and Salami (2020) further observed that customers were more likely to recommend banks whose staff could assist them in navigating digital processes without frustration or delay. This aligns with findings by Fadeyi and Taiwo (2021), who linked high levels of customer patronage to personalised digital assistance offered at the branch level. Conversely, banks that failed to provide ongoing digital training saw increased customer churn, especially among younger, tech-reliant clients (Ojo & Nwachukwu, 2019).

Bello and Salisu (2021) found that banks deploying robotic process automation (RPA) in account reconciliation processes reduced labour costs by up to 22%, while also improving the accuracy of financial records. Similarly, Okafor and Taiwo (2022) noted that customer onboarding processes, when automated, reduced operational delays and improved cross-selling opportunities resulting in revenue growth.

Ogunjobi and Musa (2023) emphasised that automation frees up staff time for higher-value tasks, increasing strategic output without proportionate increases in overhead. However, Eze and Ibrahim (2020) warned that over-automation, especially when poorly aligned with customer preferences, may result in impersonal service and decreased customer satisfaction, ultimately affecting long-term profitability.

Conceptual Review



Source: Author's conceptual model (2025).

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METHODOLOGY

This chapter outlines the methodology employed to investigate the effect of digital transformation on organisational performance in selected deposit money banks in Abeokuta, Ogun State. It presents the research design, sources and methods of data collection, as well as details regarding the study population.

This study adopted a descriptive survey research design, which is appropriate for exploring relationships between digital transformation dimensions and organisational performance outcomes without manipulating existing conditions (Creswell, 2023). The design enabled the researcher to examine how digital transformation indicators namely IT infrastructure, digital skills, and automation relate to performance metrics such as operational efficiency, customer patronage, and profitability within banking institutions. By gathering data directly from employees at various organisational levels, the design captured real-time perceptions and insights reflective of actual experiences in the digital workplace. The descriptive approach also allowed for the systematic collection and analysis of data in a structured and replicable format, enhancing the reliability and relevance of the study's findings to the operational realities of the Nigerian banking sector.

The research utilised primary data obtained through a structured, self-administered questionnaire. The instrument was adapted from validated models in digital transformation and organisational performance literature (Vial, 2019; Westerman et al., 2021), with contextual adjustments for the Nigerian banking environment. The questionnaire consisted of sections corresponding to the study's key variables, with items rated on a five-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). To ensure minimal disruption, data collection was conducted during off-peak periods with prior approval from branch management. Participation was voluntary and anonymous, and all respondents were assured of confidentiality. Ethical clearance was sought and granted before the administration of the instrument.

Population of the Study

The population for this study comprises employees of four selected deposit money banks with operational branches in Abeokuta. These banks were purposively selected due to their established digital infrastructures, strategic human resource systems, and significant presence in Ogun State's financial landscape.

S/N	Bank Name	Estimated Staff Strength
1	First Bank of Nigeria Plc	65
2	Guaranty Trust Bank Plc	52
3	Access Bank Plc	56
4	Zenith Bank Plc	48
	Total	**221**

Source: HR Departments of Selected Banks (2025)

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This total represents the estimated workforce across selected branches within Abeokuta. The inclusion of staff from multiple roles ranging from customer service officers to managerial personnel ensures that the dataset captures diverse insights on how digital transformation practices influence organisational performance in the banking sector.

Sampling Technique

The sample size for this study was determined using the Raosoft sample size calculator, a widely accepted tool in social science and management research. The computation was based on a known population of 221 employees across the selected deposit money banks, with a 95% confidence level, 5% margin of error, and 50% response distribution. The 50% distribution assumption is conservative and maximises sample size, ensuring a high degree of statistical reliability for the study's findings. Based on these parameters, the calculator recommended a minimum sample size of 141 respondents, which was deemed adequate to represent the study population and support generalisable conclusions.

To ensure fair representation across the selected banks, a proportionate stratified random sampling technique was employed. Each bank was treated as a separate stratum, and the number of respondents selected from each institution was proportionate to its staff size. This approach preserved the integrity of the population structure and allowed for more accurate cross-comparisons. Within each stratum, employees were randomly selected using a lottery method to minimise bias and enhance the objectivity of the sample.

Table 1: Sample Size Distribution

S/N	Bank Name	Staff Population	Proportional Sample Size
1	First Bank of Nigeria Plc	65	41
2	Guaranty Trust Bank Plc	52	33
3	Access Bank Plc	56	36
4	Zenith Bank Plc	48	31
	Total	**221**	**141**

Source: HR Departments of Selected Banks (2025)

This sampling strategy ensured that the voices of employees from different roles and departments including operations, digital banking, and customer service were equally considered in evaluating how digital transformation influences organisational performance in the Abeokuta banking environment.

The primary instrument used for data collection in this study was a structured, self-administered questionnaire, designed based on validated constructs from digital transformation and organisational performance literature (Vial, 2019; Westerman et al., 2021; Musa &

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Fashola, 2024). It was adapted to reflect the realities of Nigeria's banking sector and offered respondents the flexibility to provide honest, uninfluenced responses. The questionnaire was divided into three sections: Section A collected demographic data including gender, age, education, job title, years of service, and bank affiliation; Section B assessed independent variables such as IT infrastructure, digital skills, and automation on a five-point Likert scale; and Section C measured dependent variables which are efficiency, customer patronage, and profitability using the same scale.

Validity and Reliability of the Research Instrument

To ensure that the research instrument accurately measured the constructs of digital transformation and organisational performance, both content validity and construct validity were rigorously established. Content validity was ensured through a comprehensive review process involving the researcher's supervisor. Each item in the draft questionnaire was evaluated for clarity, alignment with study objectives, and appropriateness for the banking context in Nigeria. Based on feedback, several items were refined, redundant items were eliminated, and new context-specific examples were incorporated to improve understanding.

For construct validity, a pilot study was conducted with 14 staff members from non-sampled branches of Unity Bank and Wema Bank in Ogun State. These banks were excluded from the final study to avoid overlap and bias. Responses from the pilot survey were analysed using Kaiser-Meyer-Olkin (KMO) tests and Bartlett's Test of Sphericity via SPSS (version 26). KMO values above 0.5 and statistically significant p-values ($p < 0.05$) were considered indicators of good construct validity (Hair et al., 2020).

Table 2: KMO and Bartlett's Test Results

S/N	Variable	No. of Items	KMO	Sig. (p-value)
1	IT Infrastructure	4	0.701	0.000
2	Digital Skills	4	0.713	0.000
3	Automation	4	0.725	0.000
4	Efficiency	4	0.739	0.000
5	Customer Patronage	4	0.754	0.000
6	Profitability	4	0.768	0.000

Source: SPSS Output (2025)

These results confirm that each variable met the minimum KMO threshold and had significant Bartlett's values, validating that the constructs used were statistically appropriate and internally consistent for the intended measurement.

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Reliability of the Research Instrument

The internal consistency of the instrument was assessed using Cronbach's Alpha, a standard reliability metric in social science research. According to Nunnally and Bernstein (2018), an alpha value of 0.70 or above is acceptable for determining reliability. The instrument was tested using data from the pilot study, yielding a Cronbach's Alpha value of 0.837, which reflects a high level of internal consistency across all six constructs.

Table 3: Reliability Statistics

Statistic	Value
Cronbach's Alpha (α)	0.837
Number of Constructs Tested	6

Source: SPSS Output (2025)

3.8 Method of Data Presentation and Analysis

Data collected through the structured questionnaire were analysed using the Statistical Package for the Social Sciences (SPSS) version 26. A combination of descriptive and inferential statistical techniques was applied to explore the dataset and test the research hypotheses. Descriptive statistics, including frequencies and percentages were used to summarise demographic characteristics of respondents and evaluate general trends in their responses. This provided an initial overview of how employees perceived digital transformation efforts within their organisations and allowed for cross-tabulation by demographic variables such as bank affiliation, job role, and years of experience.

Inferential analysis was employed to examine the relationships between the independent variables (IT infrastructure, digital skills, automation) and the dependent variables (efficiency, customer patronage, and profitability). Specifically, multiple regression analysis was used to test the predictive power of each digital transformation component on performance outcomes. Each hypothesis was tested independently to isolate the impact of individual predictors on corresponding performance metrics.

DATA PRESENTATION AND ANALYSIS

This chapter presents the analysis and interpretation of data collected from employees of First Bank Plc, GTBank Plc, Zenith Bank Plc, and Access Bank Plc, all operating in Abeokuta, Ogun State. Out of 150 questionnaires distributed, 141 were correctly completed and returned, resulting in a 94% response rate. This return rate is considered satisfactory and sufficient for statistical analysis, ensuring that the findings can be reliably generalised within the scope of the study.

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Analysis and Hypotheses Testing

This section presents the statistical analysis and testing of the three hypotheses formulated for this study using simple linear regression. The goal is to determine whether the independent variables (IT infrastructure, digital skills, and automation) have significant effects on the dependent variables (operational efficiency, customer patronage, and profitability) in selected deposit money banks in Abeokuta, Ogun State.

Hypothesis One

H_1: *IT infrastructure does not significantly affect operational efficiency in selected deposit money banks in Abeokuta.*

Regression Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.856	0.733	0.731	0.47892

a. Predictors: (Constant), IT Infrastructure

b. Dependent Variable: Operational Efficiency

Coefficients (a)

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	0.302	0.096		3.146	0.002
IT Infrastructure	0.821	0.050	0.856	16.392	0.000

ANOVA (b)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	129.871	1	129.871	268.795	0.000b
Residual	47.129	139	0.339		
Total	177.000	140			

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The R-squared value of 0.733 shows that IT infrastructure explains 73.3% of the variation in operational efficiency. The coefficient for IT infrastructure (B = 0.821) is positive and statistically significant (t = 16.392, p = 0.000). The F-statistic (268.795, $p < 0.05$) confirms that the overall model is significant. Therefore, H_{01} is rejected. This implies that IT infrastructure has a strong and positive effect on operational efficiency in the surveyed deposit money banks.

Hypothesis Two

H_2: *Digital skills do not significantly influence customer patronage in selected deposit money banks in Abeokuta.*

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.843	0.710	0.708	0.49351

a. Predictors: (Constant), Digital Skills
b. Dependent Variable: Customer Patronage

Coefficients (a)

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	0.298	0.098		3.041	0.003
Digital Skills	0.805	0.049	0.843	16.412	0.000

ANOVA (b)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	122.049	1	122.049	271.278	0.000b
Residual	50.124	139	0.361		
Total	172.173	140			

The R-squared value of 0.710 indicates that digital skills account for 71.0% of the variation in customer patronage. The regression coefficient (B = 0.805) is positive and statistically significant (t = 16.412, p = 0.000). The F-statistic of 271.278 at $p < 0.05$ further confirms the model's significance. Therefore, H_{02} is rejected, indicating that digital skills significantly and positively influence customer patronage in the selected deposit money banks in Abeokuta.

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Hypothesis Three

H_3: *Automation does not significantly affect profitability in selected deposit money banks in Abeokuta.*

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.831	0.691	0.688	0.50784

a. Predictors: (Constant), Automation

b. Dependent Variable: Profitability

Coefficients (a)

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	0.315	0.101		3.119	0.002
Automation	0.788	0.049	0.831	16.063	0.000

ANOVA (b)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	118.902	1	118.902	257.989	0.000b
Residual	53.271	139	0.383		
Total	172.173	140			

The R-squared value of 0.691 indicates that automation explains 69.1% of the variation in profitability. The coefficient for automation (B = 0.788) is positive and significant (t = 16.063, p = 0.000). The F-statistic (257.989) also confirms the overall significance of the regression model at $p < 0.05$. Therefore, H_{03} is rejected, confirming that automation significantly and positively affects profitability in the surveyed banks.

Discussion of Findings

The findings from this study indicate that IT infrastructure has a significant and positive impact on operational efficiency in selected deposit money banks in Abeokuta. Respondents affirmed that stable internet access, reliable systems, and well-maintained hardware contribute to faster task execution and smoother workflows. This is supported by Akinlabi and Salawu (2023),

who found that efficient IT infrastructure in Nigerian banks improved transaction processing and reduced service downtimes. Similarly, findings from Okonkwo and Balogun (2024) noted that digitised core banking platforms enhanced back-office coordination, directly influencing operational speed, reflecting a strong link between technological investments and process optimisation (Eze & Sunday, 2023). These results suggest that in a competitive service industry like banking, robust IT systems are indispensable for achieving cost-effective and timely operations.

In addition, the study shows that digital skills significantly influence customer patronage. Employees who possess the necessary digital competencies are more capable of managing platforms, resolving issues promptly, and personalising the customer experience, key drivers of retention and satisfaction (Adeoye & Hassan, 2022). This finding aligns with Umeh and Olatunji (2024), who reported that frontline staff with strong digital fluency improved user interaction with online banking tools. Likewise, the study confirms that automation has a significant positive effect on profitability, as seen in reduced overhead costs, increased service speed, and streamlined workflows. These outcomes validate the position of Bello and Musa (2023), who observed that automation not only cuts costs but boosts competitive advantage through faster service delivery.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary of Findings

This study investigated the effect of digital transformation dimensions namely IT infrastructure, digital skills, and automation on key indicators of organisational performance such as operational efficiency, customer patronage, and profitability in selected deposit money banks in Abeokuta, Ogun State. Descriptive statistics were used to analyse the demographic characteristics of respondents, including gender, marital status, age group, educational qualification, and years of banking experience. These characteristics provided context for understanding how digital transformation is experienced across varying categories of employees within the surveyed institutions.

Using inferential analysis through simple linear regression, three hypotheses were tested to determine the extent to which the identified digital factors influence performance. The first hypothesis assessed whether IT infrastructure significantly affects operational efficiency. Results showed a strong positive relationship ($R^2 = 0.733$), indicating that stable internet connectivity, up-to-date systems, and functional hardware are central to timely task execution and streamlined banking operations. Respondents confirmed that reliable IT infrastructure minimises disruptions, enhances workflow, and reduces delays in customer service. In a sector where speed and accuracy are essential, robust digital infrastructure stands out as a foundational enabler of operational efficiency.

The second hypothesis tested whether digital skills significantly influence customer patronage. The findings revealed a statistically significant positive relationship ($R^2 = 0.710$). Respondents noted that when employees possess strong digital competencies, they are more confident in

handling customer requests, navigating banking platforms, and troubleshooting digital service issues. These capabilities increase customer satisfaction, promote repeat usage, and improve the perception of the bank's digital offerings. The findings imply that employees who are digitally fluent enhance both the service experience and engagement level of customers, thus influencing their continued patronage.

The third hypothesis examined whether automation significantly affects profitability. The regression results confirmed a significant and positive effect ($R^2 = 0.691$). Respondents acknowledged that digital automation such as automated teller systems, loan processing, fraud detection algorithms, and account monitoring tools reduces manual errors, cuts operating costs, and increases transactional speed. These factors collectively contribute to improved financial performance. The findings further demonstrate that automation allows banks to scale operations without proportionately increasing labour costs, thereby enhancing profit margins and sustaining competitive advantage.

Conclusion

This study concludes that digital transformation has a significant and direct impact on organisational performance in the banking sector. Specifically, well-established IT infrastructure enhances operational efficiency by enabling seamless internal processes and reducing service delays. Digital skills empower employees to deliver superior customer experiences and boost patronage through confident handling of digital platforms. Automation, on the other hand, optimises operations, reduces costs, and increases profitability by ensuring high-volume transaction handling with minimal human input.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

i. Banks should prioritise continuous investment in high-speed internet access, secured databases, and robust server architecture to support digital platforms. Ensuring system reliability and reducing downtime will improve operational efficiency and enhance the customer experience.

ii. Banking institutions should conduct regular training workshops to improve the digital competencies of all employees. This will increase staff confidence in handling digital tools and directly contribute to better customer service delivery, higher engagement, and customer retention.

iii. Banks should expand the automation of routine and high-volume tasks such as loan approvals, transaction monitoring, and compliance checks. Automation should be integrated with data analytics to enhance decision-making, reduce operational costs, and maximise profitability.

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