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Information Communication Technology and Strategic Management Practices among Deposit Money Banks in Ondo State, Nigeria

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Abstract

This study examined the effect of Information Communication Technology (ICT) on strategic management practices among Deposit Money Banks (DMBs) in Ondo State, Nigeria, with specific attention to strategic formulation, strategic implementation, and strategic evaluation and control. The study was anchored on the Resource-Based View and Dynamic Capability theories and adopted a survey research design. The population comprised management staff, non-management staff, and customers of Systemically Important Banks (SIBs) operating within Akure metropolis. A purposive sample of four hundred (400) respondents was drawn, and data were collected using a structured, validated questionnaire whose reliability was confirmed by a Cronbach alpha coefficient of 0.86. Data were analysed using descriptive statistics (mean and standard deviation) and simple linear regression. The results show that ICT has a positive and statistically significant effect on strategic formulation ($R^2 = 0.586$, $\beta = 0.854$, $p < 0.05$), strategic implementation ($R^2 = 0.577$, $\beta = 0.653$, $p < 0.05$), and strategic evaluation and control ($R^2 = 0.522$, $\beta = 0.431$, $p < 0.05$) among the sampled banks. The study concludes that ICT infrastructure is a critical enabler across all phases of the strategic management process in the Nigerian banking sector. It is recommended that Deposit Money Banks should increase investment in ICT infrastructure, integrate ICT tools with human expertise and technical capability, and ensure adequate maintenance and utilisation of ICT platforms to strengthen strategic formulation, implementation, and evaluation.

Keywords: *Information Communication Technology, Strategic Management, Strategic Formulation, Strategic Implementation, Strategic Evaluation and Control, Deposit Money Banks*

1.0 Introduction

The contemporary business environment presents numerous challenges for both public and private organisations (Njagi, 2020). Organisations embark on strategic management with the aim of developing and sustaining competitive advantage, a process that comprises strategy formulation, implementation, evaluation, and control

(Onikoyi et al., 2021). The capacity to build and execute new strategies quickly and effectively is central to organisational success; formulating excellent strategies is important, but effective implementation and evaluation ultimately determine whether the intended results are achieved. In today's dynamic business environment, it is doubtful that organisations, and banks in particular, can carry out strategic management successfully without the adoption of Information Communication Technology (ICT). Information technology comprises computers and other interconnected devices used for collecting, storing, manipulating, managing, moving, controlling, displaying, switching, interchanging, transmitting, or receiving data and information (Adeniran, 2021). ICT has influenced organisational and business processes broadly (Sattar & Johari, 2020), and evidence of this influence is seen in the emergence of new products, new tools, and greater product diversity (Pearce & Robinson, 2020). New technologies have shortened the life cycle of existing products through the new goods, services, and markets they create (Deacon & Manolescu, 2021). Beyond raising firms' productivity, minimising cost, and enhancing business processes, ICT has also improved the formulation, implementation, and evaluation of strategies that help organisations gain competitive advantage (Kihara, Bwisa & Kihoro, 2021).

The link between strategic management and ICT is well established. Dasgupta et al. (2021) argue that ICT is a useful tool for scanning, assessing, and analysing the environment, which is the first step in strategy formulation; ICT also enhances the collection of timely and accurate data needed for formulating strategic goals and objectives. Technology is important to strategic formulation in two ways: first, technology and technological change form part of the external environment that shapes an organisation's strategic options (Pearce & Robinson, 2021); second, ICT itself is one of the internal strategic capabilities an organisation must build to achieve success.

After a strategy is developed, the next stage is strategy implementation putting the strategy into action. The success of implementation today also depends on the deployment of ICT infrastructure, which facilitates clear communication of strategic goals from formulation to execution by linking individual tasks to broader objectives. It also supports the efficient assignment of tasks and the development and execution of the programmes and policies needed to operationalise strategy (Wakefield, 2016). Technology infrastructure, devices, and platforms also play an important role in implementing strategies such as product development, market development, and market penetration, among others (Dasgupta et al., 2021).

The success of strategy also depends on strategic evaluation and control. It is important to continuously monitor and evaluate strategy once implemented if it is to succeed. Technology provides the tools used to monitor and track strategic performance (Muhammad, Jantan & Keong, 2018), and ICT tools facilitate the collection of relevant data for assessing how well a new strategy is performing (Rajasekar, 2014). With the support of ICT, organisational strategy can be tracked and monitored more effectively so that corrective measures can be applied in good time. ICT further provides an improved and more impartial measurement and monitoring of organisational strategic performance, reducing the element of human bias and subjectivity connected with monitoring and executing organisational responsibilities and strategies (Ibitomi, 2022).

The Dynamic Capability Theory proposed by Teece, Pisano and Shuen (1997) links the achievement of competitive advantage in a dynamic environment to a firm's capacity to reconfigure, leverage, integrate, and continuously learn. For banks to gain competitive advantage in an ever-changing business environment, they must build and expand ICT competences that are integrated with existing resources such as human expertise and technical capability, and advanced through continuous learning (Menor & Wiedman, 2021). This underscores the importance of ICT utilisation in strategic management.

Deposit Money Banks (DMBs) play a significant role in the economy by mobilising idle funds from surplus units and efficiently allocating them to deficit units for investment and production, thereby contributing to economic growth. Owing to the high level of ICT adoption in the banking sector, numerous studies have examined the extent to which ICT affects the performance and operations of DMBs in Nigeria. However, the extent to which ICT affects strategic management and decision-making in the Nigerian banking sector has not received adequate attention in prior studies, despite the critical role strategic management plays in business

today. Against this background, this study examines the effect of ICT on strategic management among Deposit Money Banks in Ondo State.

1.2 Statement of the Problem

Business managers face challenges arising from the external environment in which the business operates, including the technological environment. Advances in technology create uncertainty and complexity, reducing the effectiveness of prevailing strategies and making the formulation, implementation, and evaluation of strategy more challenging. As technology changes rapidly, firms are confronted with the challenge of altering their strategic plans to cope with new and changing technologies.

Moreover, as technology cycles continue to shorten, organisational managers must decide whether to adopt new technologies or retain older ones that may reduce future competitiveness a difficulty compounded by the challenge of forecasting the direction of new technologies and integrating them into strategy formulation, implementation, and control.

Despite the importance of integrating technology into strategic management, empirical evidence on the effect of strategic management (formulation, implementation, and evaluation) on the performance of business organisations in Nigeria remains scanty. With the exception of Edward (2022), few studies have examined how technology influences strategic management practices in Nigeria. This study therefore seeks to fill this gap by examining the effect of Information Communication Technology on strategic management in the banking sector in Ondo State.

1.3 Objectives of the Study

The main objective of this study is to examine the effect of ICT on strategic management practices among Deposit Money Banks in Ondo State. The specific objectives are to:

- i. examine the extent to which ICT affects strategic formulation among DMBs in Ondo State;
- ii. determine whether ICT has a significant effect on strategic implementation among DMBs in Ondo State; and
- iii. examine the relationship between ICT and strategic evaluation and control among DMBs in Ondo State.

1.4 Research Questions

The study is guided by the following research questions:

- i. To what extent does ICT affect strategic formulation among DMBs in Ondo State?
- ii. Does ICT have a significant effect on strategic implementation among DMBs in Ondo State?
- iii. Is there a significant relationship between ICT and strategic evaluation and control among DMBs in Ondo State?

1.5 Statement of Hypotheses

At the 95% confidence level, the following hypotheses were formulated in null form:

- i. H_{01} : ICT has no significant effect on strategic formulation among DMBs in Ondo State.
- ii. H_{02} : ICT has no significant effect on strategic implementation among DMBs in Ondo State.
- iii. H_{03} : There is no significant relationship between ICT and strategic evaluation and control among DMBs in Ondo State.

Scope of the Study

The study covers Deposit Money Banks located in Ondo State, with specific reference to Akure metropolis. Akure was chosen because it hosts a concentration of Systemically Important Banks (SIBs), which account for over 70% of banking customers and liquidity in Nigeria. The banking sector was selected because it is among the sectors that have embraced ICT most extensively in Nigeria. The strategic management variables covered include strategic formulation, strategic implementation, and strategic evaluation and control, while the ICT variables covered include the internet, email, automated teller machines, mobile banking, computers, and other devices used for collecting, processing, storing, and transmitting information to customers and other stakeholders.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Strategic Management

Strategic management is defined as the set of analyses, decisions, and actions an organisation undertakes to create and sustain competitive advantage, linking strategic planning and decision-making to day-to-day business operations. The strategy process covers two broad components: the analysis of strategic intent — vision, mission, and strategic objectives — and the internal and external environment; and the decisions relating to the competitive advantage an organisation must acquire to survive in its industry over the long run. This requires business leaders to allocate the resources and design the structures needed to realise strategy through formulation, implementation, evaluation, and control (Gregory et al., n.d.; Wheelen & Hunger, 2012).

2.1.2 Strategic Formulation

Strategy consists of the actions and decisions an organisation intends to employ in reaching its goals and objectives it defines what the organisation must do to achieve its aims. Strategy formulation is the process through which an organisation decides on the most suitable courses of action for achieving its goals and objectives (Ahmed & Mukhongo, 2017). It is the stage of strategic management concerned with developing the mission and vision statements, recognising external threats and opportunities, evaluating internal strengths and weaknesses, and developing long-term objectives, alternative tactics, and policy guidelines (Branislav, 2014). Environmental scanning and analysis are therefore central to strategy development, as they result in strategies that help a business achieve competitive advantage and realise its vision and goals (Ahmed & Mukhongo, 2017). Alese (2017) stresses the importance of a comprehensive and objective analysis of information gathered during environmental scanning in order to formulate a strategy that helps the firm achieve its short- and long-term objectives.

2.1.3 Strategic Implementation

Strategy implementation has been defined variously by scholars. Harun (2019) sees it as putting strategy into practice and ensuring that the different units of an organisation successfully perform their assigned roles, which requires building an organisational structure capable of implementing the plan, allocating supporting budgets, and executing the necessary programmes. Implementation also includes developing information and follow-up systems to monitor implementation progress, and shaping the external regulatory environment needed to ensure the strategy's success (Wairu & Gitonga, 2018). Strategy implementation is a continuous process of executing strategies, policies, programmes, and action plans that enable an organisation to utilise its resources to take advantage of opportunities in the competitive environment; it involves transforming strategy into action and is concerned with how a firm employs its structure and control systems in executing strategies that improve performance (Jaoua, 2018). Among the proxies vital to successful implementation in the banking sector are technology adoption, strategic leadership, and communication. Improvements in technology and changes in the environment have made it necessary for organisations to reorganise how they operate, as technology is a key variable in sustaining organisational development and growth (Yin et al., 2022).

2.1.4 Strategic Evaluation and Control

Strategic control helps an organisation identify when strategies are not operating according to plan and assists in spotting potential implementation problems before they worsen (Muriuki, 2017). While strategy formulation concerns developing strategy and implementation concerns putting it to work, strategic evaluation and control involves measuring strategic performance, comparing it against the standards set in the plan, and correcting deviations. Organisations use strategic control to make necessary adjustments to existing strategies in response to changes in the internal environment (Ahmed & Mukhongo, 2017).

Strategy evaluation and control is the final stage of the strategic management process, and the impact of ICT on this stage is considerable. With the support of technology, organisational strategy can be tracked and monitored more effectively, allowing corrective measures to be applied. ICT provides an improved and more impartial measurement of organisational strategic performance, reducing the human bias and subjectivity associated with monitoring and executing organisational responsibilities and strategies (Ibitomi, 2022).

2.1.5 Information Communication Technology

Information technology comprises computers, subsidiary equipment, software, hardware, procedures, and connected services and resources used for collecting, storing, manipulating, managing, moving, controlling, displaying, switching, interchanging, transmitting, or receiving data and information. ICT is the set of technologies that help organisations create and transmit information and data (Breznik, 2022) and has grown into a vital organisational component in today's globalised era. It is needed by organisations to gain competitive advantage and achieve success (Hemmatfar, Salehi & Bayat, 2010), and it has affected virtually every sphere of human life; businesses can no longer operate efficiently without ICT, given that firms now compete in a global environment.

2.2 Theoretical Framework

2.2.1 Resource-Based View Theory

The Resource-Based View (RBV) traces its intellectual roots to Penrose's (1959) theory of the growth of the firm and was later formalised by Barney (1991), who argued that a firm gains competitive advantage when its resources are valuable, rare, and difficult to imitate or substitute. A valuable resource enhances a firm's competitive position relative to its rivals; a resource is rare when its demand exceeds its supply; and a resource is insulated from imitation or substitution when replicating it is prohibitively costly (Petter & DeLone, 2013). Pearce and Robinson (2013) note that resources can be managed such that their outcomes are difficult for competitors to imitate, creating a competitive barrier that improves organisational performance — reputation being one such resource.

This theory is appropriate for the present study because ICT is treated as a strategic organisational resource in the banking industry: the effective use of ICT helps banks gain competitive advantage in a dynamic business environment, and banks are more likely to succeed when modern technologies are deployed not only in day-to-day operations but also in strategic management and service delivery.

2.2.2 Dynamic Capability Theory

Dynamic Capability Theory, developed by Teece, Pisano and Shuen (1997), holds that a firm's ability to sustain competitiveness depends on its capacity to integrate, build, and reconfigure internal and external competences to cope with a rapidly changing environment. King (2019) describes dynamic capability as an organisation's ability to deliberately build, expand, or adjust its resource base. Dynamic capabilities enable firms to enter new businesses and extend existing ones through internal growth, strategic alliances, and the creation of new products and production processes; Menor and Wiedman (2021) note that a firm's capacity to respond to environmental change is itself a dynamic capability.

This study adopts the Dynamic Capability Theory as its guiding framework, given its emphasis on the need for organisations to build ICT-related capabilities and competences to gain competitive advantage in a fast-changing business environment. The theory suggests that, because traditional strategic management approaches are becoming less effective amid rapid environmental change, banks must reorganise to leverage ICT infrastructure — integrated with human and technical resources and supported by continuous learning — in order to improve strategic formulation, implementation, evaluation, and control.

2.3 Empirical Review

A growing body of empirical work links ICT to strategic and operational outcomes in the banking sector, both in Nigeria and across Africa. Momoh and Iyobhebhe (2023) examined the effect of strategic management practices on bank competitiveness using a descriptive survey of staff of Zenith Bank Plc and First Bank of Nigeria (n = 231); descriptive statistics and Pearson Product-Moment Correlation showed that strategic intent and strategy formulation had a significant positive effect on bank competitiveness. Ramaisa, Huzaifa and Fazeyha (2017) examined the role of information technology in strategy formulation in Pakistan's banking sector using a survey design and interviews, finding that information technology had a significant positive effect on strategy formulation, particularly by facilitating the production of accurate, relevant, and timely information. More recent studies reinforce these findings and extend them to strategic implementation and evaluation. Girma and Beshah (2023), studying banks in Addis Ababa, Ethiopia, found that ICT adoption practices had a substantial direct and indirect influence on banks' strategic communication, an important component of strategy implementation. Ilo, Soyebbo and Olaiya (2024), using data from the Central Bank of Nigeria and the Nigeria

Inter-Bank Settlement System, found that web payment platforms, mobile money, automated teller machines, and point-of-sale terminals had significant positive long-run relationships with the performance of Deposit Money Banks in Nigeria, underscoring the strategic value of sustained ICT investment. Similarly, Ede (2025), in a study of Deposit Money Banks in South-South Nigeria, reported that mobile banking and automated teller machines were significantly related to accurate transaction processing and service delivery speed, both of which are outcomes of effective strategic implementation. Kabaji (2023), examining commercial banks in Mombasa County, Kenya, found that mobile banking ($\beta = 0.478$) and internet banking ($\beta = 0.160$) had a significant influence on bank performance, while Fuseini, Ibrahim, Adam and Vo (2024), using system GMM estimation on panel data from 48 African countries, found that ICT significantly moderates the relationship between financial development and banking sector efficiency. In the same vein, Ojogbo and Odor (2025) found that digital leadership significantly predicted digital transformation in Nigerian Deposit Money Banks, aligning technology adoption with strategic direction, while a 2026 dynamic-capability-anchored study of Nigerian DMBs (International Journal of Research and Innovation in Social Science, 2026) reported a positive relationship between digital-channel adoption and bank performance, noting that the extent of benefit depends on each bank's capacity to integrate digital resources into its strategic and operational renewal.

Taken together, these studies spanning Nigeria, Ethiopia, Kenya, and cross-country African data consistently associate ICT adoption with improved strategic formulation, implementation, communication, and evaluation outcomes in the banking sector, lending empirical support to the theoretical position that ICT functions as both a strategic resource and a dynamic capability. However, as previously noted, dedicated empirical attention to the specific formulation-implementation-evaluation triad of strategic management, as distinct from general bank performance, remains comparatively limited in the Nigerian context the gap this study addresses.

3.0 METHODOLOGY

3.1 Research Design

This study adopted a survey research design, which involves collecting data from respondents selected from a defined population without any attempt to manipulate the sample or the variables under observation (Asika, 2008). The survey design was considered appropriate given the study's objective of assessing perceptions and relationships between ICT and strategic management practices as they naturally occur within the sampled banks.

3.2 Population of the Study

The population of the study comprised staff of Deposit Money Banks in Ondo State, made up of management staff (top-level, middle-level, and lower-level managers), non-management staff, and customers of DMBs in the State. The inclusion of non-management staff and customers, unlike in many previous studies, was intended to improve the objectivity of the study by allowing the responses of management to be corroborated by those of non-managers and customers.

3.3 Sample Size and Sampling Technique

Since the exact size of the population was not known, a purposive sample of four hundred (400) participants was used, drawn from the Systemically Important Banks (SIBs) operating in Akure.

3.4 Research Instrument

The primary source of data for the study was a structured questionnaire divided into two sections. Section A captured the bio-data of respondents, while Section B contained items related to the study's objectives. Each item in Section B was measured on a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD).

3.5 Validity of the Instrument

To ascertain the suitability of the research instrument, validity and reliability tests were conducted. The face and content validity of the questionnaire were assessed by experts in strategic management.

3.6 Reliability of the Instrument

Twenty copies of the questionnaire were administered, in two rounds, to management staff of DMBs in Ekiti State a location with characteristics similar to the study area but distinct from it and Cronbach's alpha was used

to assess the internal consistency of responses. The instrument was adjudged valid by the reviewing experts, and reliability testing produced an overall Cronbach's alpha value of 0.86, indicating that the instrument was reliable. The result of the reliability test is presented in Table 1.

Table 1: Reliability Statistics of the Research Instrument

Variable	No. of Items	Cronbach's Alpha	Remark
Strategic Formulation	5	0.84	Reliable
Strategic Implementation	5	0.85	Reliable
Strategic Evaluation and Control	5	0.83	Reliable
ICT Utilisation	5	0.88	Reliable
Overall Instrument	20	0.86	Reliable

Source: Field Survey, 2026

3.7 Method of Data Collection

The questionnaire was administered personally to respondents over six (6) days by the researcher and three research assistants. Completed questionnaires were retrieved on the same day, at the point of distribution. Personal administration was chosen over mail distribution to improve the response rate.

3.8 Method of Data Analysis

Both descriptive and inferential statistics were used in the study. Descriptive statistics — mean and standard deviation were used to answer the research questions, with a criterion mean of 3.00. Simple linear regression analysis was used to estimate the relationship between ICT and strategic management, and to test the study's hypotheses.

3.9 Model Specification

Model specification involves expressing the relationship between the dependent and independent variables in mathematical form (Gujarati, 2006). Three simple regression models were formulated and estimated in this study, adapted, with modification, from the model of Edward (2022):

SFOR = f(TECHP) ... (1) SIMP = f(TECHP) ... (2) SEVC = f(TECHP) ... (3) Where: SFOR = Strategic Formulation; SIMP = Strategic Implementation; SEVC = Strategic Evaluation and Control; TECHP = Technology Prevalence.

In the present study, Edward's (2022) models are modified as follows: Model 1: SFOR = f(ICT) ... (4) SFOR = $\alpha + \beta_1 \text{ICT} + \mu$... (5) Model 2: SIMP = f(ICT) ... (6) SIMP = $\alpha + \beta_2 \text{ICT} + \mu$... (7) Model 3: SEVC = f(ICT) ... (8) SEVC = $\alpha + \beta_3 \text{ICT} + \mu$... (9) Where ICT = Information Communication Technology; SEVC = Strategic Evaluation and Control; α = the intercept; β_1 , β_2 , and β_3 measure the effect of ICT utilisation on strategic formulation, implementation, and evaluation respectively; and μ represents the stochastic residual term capturing the effect of other variables, apart from ICT, that affect strategic management but were omitted from the models.

4.0 RESULTS AND DISCUSSION

4.1 Response Rate

Four hundred and two (402) copies of the questionnaire were administered to respondents across the sampled DMBs; four hundred (400) were correctly completed, returned, and used for analysis, representing a response rate of 99.5%.

4.2 Descriptive Analysis

Table 2: Effect of ICT on Strategic Formulation

S/N	Item	Mean	Std. Dev.	Decision
1	ICT tools are considered during strategy formulation in your	3.84	0.89	Agreed

S/N	Item	Mean	Std. Dev.	Decision
	organisation			
2	Banks in Ondo State employ ICT tools in environmental scanning	3.89	0.54	Agreed
3	ICT facilitates the collection of accurate data for formulation of goals and strategy	3.77	1.14	Agreed
4	Speedy collection of data for formulation of goals and strategies is enhanced by ICT	3.89	1.02	Agreed
5	Banks use ICT tools to assess and analyse trends	3.68	0.98	Agreed
	Grand Mean	3.81	0.91	Agreed

Source: Field Survey, 2024

Table 2 shows the effect of ICT on the strategy formulation process among banks in Ondo State. The grand mean of 3.81 reveals that respondents agreed that ICT affects the formulation of strategies. The low standard deviation (0.91) indicates limited variability in the data, meaning the mean score is a reliable descriptive measure. This aligns with the view that managers must understand ICT and ensure it is integrated into the strategic management process to guarantee success.

Table 3: Effect of ICT on Strategic Implementation

S/N	Item	Mean	Std. Dev.	Decision
1	ICT enhances the communication of strategic goals across the banks	4.16	0.97	Agreed
2	Banks utilise ICT in development of new products for customers	4.10	0.85	Agreed
3	Assignment of tasks for strategy implementation is communicated clearly through ICT tools	3.97	0.95	Agreed
4	Policies and programmes for implementing strategies are communicated and executed through ICT platforms	3.88	1.13	Agreed
5	Managers use ICT tools in motivating subordinates during strategic implementation	3.87	1.09	Agreed
	Grand Mean	3.96	1.02	Agreed

Source: Field Survey, 2026

Table 3 shows respondents' views on ICT utilisation and strategic implementation among banks in Ondo State. The grand mean of 3.96 indicates that respondents agreed that ICT enhances the implementation of strategy, while the standard deviation (1.02) shows low dispersion around the mean, so the mean can be relied upon. This finding is consistent with the view that ICT has become the primary channel through which firms implement their strategies and business models.

Table 4: Effect of ICT on Strategic Evaluation and Control

S/N	Item	Mean	Std. Dev.	Decision
1	ICT enables timely monitoring of strategy implementation progress	4.41	0.88	Agreed

S/N	Item	Mean	Std. Dev.	Decision
2	ICT facilitates identification of deviations from strategic plans	4.35	0.92	Agreed
3	ICT supports objective evaluation of strategic outcomes	4.29	1.01	Agreed
4	ICT enhances prompt communication of corrective action	4.30	0.97	Agreed
5	ICT tools reduce bias in performance monitoring of strategy	4.30	1.04	Agreed
	Grand Mean	4.33	0.97	Agreed

Source: Field Survey, 2026

Table 4 shows respondents' views on the effect of ICT on strategy evaluation and control. The grand mean of 4.33 shows that respondents generally agreed that ICT strengthens the evaluation and control of strategy among banks in Ondo State, while the low standard deviation (0.97) indicates low spread in the data.

Table 5: ICT Tools Utilised by Banks in Ondo State

S/N	Item	Mean	Std. Dev.	Decision
1	Computer platforms	4.17	1.33	Agreed
2	Mobile applications	4.02	0.94	Agreed
3	Data analytics	3.50	1.12	Agreed
4	Email	3.88	0.87	Agreed
5	Automated Teller Machine (ATM)	3.97	0.85	Agreed
	Total Mean Scores	3.91	1.02	Agreed

Source: Field Survey, 2024

Table 5 reveals that banks in Ondo State deploy a range of ICT tools in strategic management, with computer platforms (mean = 4.17) and mobile applications (mean = 4.02) most widely used. The overall low standard deviation (1.02) shows that dispersion from the mean value is low across the sampled banks, supporting the view that ICT deployment is now nearly universal among these banks.

4.3 Test of Hypotheses

Hypothesis One: ICT has no significant effect on strategic formulation among DMBs in Ondo State

Table 6: Model Summary – ICT and Strategic Formulation

Model	R	R Square	Adjusted R ²	Std. Error of Estimate	Durbin-Watson
1	.723	.586	.523	0.07371	2.127

Predictor: (Constant), Information Communication Technology. Dependent Variable: Strategic Formulation. Table 6 shows the R-Square of the estimated relationship between ICT and strategic formulation. The R-Square (0.586) reveals that 58.6% of the variation in the effectiveness of strategic formulation is explained by ICT, while the remaining 41.4% is attributable to other determinants omitted from the model. The Durbin-Watson statistic (2.127), being close to 2.00, indicates that autocorrelation is unlikely in the model.

Table 7: ANOVA – ICT and Strategic Formulation

Model	Sum of Squares	df	Mean Square	F	Sig.
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Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	430.023	1	430.023	215.01	.000
Residual	304.972	398	0.766		
Total	734.995	399			

Dependent Variable: Strategic Formulation. Predictor: (Constant), Information Communication Technology.

The F-statistic (215.01) and its associated significance value ($p = .000 < .05$) reveal that the model has overall significance, meaning the effect of ICT utilisation on the effectiveness of strategic formulation is significant at the 5% level.

Table 8: Regression Coefficients – ICT and Strategic Formulation

Variable	β	Std. Error	t	Sig.
(Constant)	2.843	.264	10.76	.000
Information Communication Technology	.854	.081	10.54	.004

Dependent Variable: Strategic Formulation.

Table 8 shows the regression estimate for ICT. The coefficient (0.854) reveals that ICT has a positive effect on the effectiveness of strategic formulation, and this effect is significant at the 5% level ($p = .004 < .05$). On the basis of these estimates, H_01 – that ICT has no significant effect on strategic formulation among DMBs in Ondo State – is rejected.

Hypothesis Two: ICT has no significant effect on strategic implementation among DMBs in Ondo State

Table 9: Model Summary – ICT and Strategic Implementation

Model	R	R Square	Adjusted R ²	Std. Error of Estimate	Durbin-Watson
1	.760	.577	.512	0.06231	2.028

Predictor: (Constant), Information Communication Technology. Dependent Variable: Strategic Implementation.

Table 9 shows the R-Square of the estimated relationship between ICT and strategic implementation. The R-Square (0.577) reveals that 57.7% of the variation in the effectiveness of strategic implementation is explained by ICT, while the remaining 42.3% is explained by other determinants omitted from the model. The Durbin-Watson statistic (2.028), being close to 2.00, indicates the model is free of autocorrelation.

Table 10: ANOVA – ICT and Strategic Implementation

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	241.014	1	241.014	117.51	.023
Residual	816.386	398	2.051		
Total	1057.400	399			

Dependent Variable: Strategic Implementation. Predictor: (Constant), Information Communication Technology.

The model shows overall significance, as revealed by the F-statistic (117.51) and its significance value ($p = .023 < .05$), meaning the model is good for predicting the value of strategic implementation.

Table 11: Regression Coefficients – ICT and Strategic Implementation

Variable	β	Std. Error	t	Sig.
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Variable	β	Std. Error	t	Sig.
(Constant)	1.612	.023	70.31	.000
Information Communication Technology	.653	.074	8.82	.025

Dependent Variable: Strategic Implementation.

The estimated coefficient of ICT (0.653) shows that ICT has a positive effect on strategic implementation, and this relationship is significant at the 5% level ($p = .025 < .05$). Consequently, Ho2 – that ICT has no significant effect on strategic implementation among DMBs in Ondo State is rejected.

Hypothesis Three: There is no significant relationship between ICT and strategic evaluation and control among DMBs in Ondo State

Table 12: Model Summary – ICT and Strategic Evaluation and Control

Model	R	R Square	Adjusted R ²	Std. Error of Estimate	Durbin-Watson
1	.722	.522	.503	0.05337	2.009

Predictor: (Constant), Information Communication Technology. Dependent Variable: Strategic Evaluation and Control.

The R-Square of the estimated model (0.522) reveals that 52.2% of the variation in strategic evaluation and control is explained by ICT, while the remaining 47.8% is attributable to other factors omitted from the model. The Durbin-Watson statistic (2.009), being close to 2.00, indicates the estimated model is free from serial correlation.

Table 13: ANOVA – ICT and Strategic Evaluation and Control

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	131.223	1	131.223	117.51	.001
Residual	406.500	398	1.021		
Total	537.723	399			

Dependent Variable: Strategic Evaluation and Control. Predictor: (Constant), Information Communication Technology.

The estimated model has overall significance as indicated by the F-statistic (117.51) and its significance value ($p = .001 < .05$); the high F-statistic also shows that the model predicts the effectiveness of strategic evaluation to a large extent.

Table 14: Regression Coefficients – ICT and Strategic Evaluation and Control

Variable	β	Std. Error	t	Sig.
(Constant)	1.832	.041	44.68	.035
Information Communication Technology	.431	.025	17.24	.004

Dependent Variable: Strategic Evaluation and Control.

Table 14 shows the coefficient of ICT on strategic evaluation. The coefficient (0.431) reveals a positive effect of ICT on strategic evaluation, and the t-value (17.24) exceeds the critical value of 1.96, indicating that the coefficient is significantly different from zero – also supported by the probability value ($p = .004 < .05$). On this

basis, Ho3 – that there is no significant relationship between ICT and strategic evaluation among DMBs in Ondo State – is rejected.

4.4 Discussion of Findings

The findings show that ICT has a significant positive effect on strategic formulation among DMBs in Ondo State ($R^2 = 0.586$; $\beta = 0.854$; $p = .004 < .05$), such that the null hypothesis (Ho1) is rejected. This is because ICT provides accurate, relevant, and timely information needed for formulating business strategy. The finding aligns with Dynamic Capability Theory, which identifies capability-building in a dynamic business environment as key to organisational success, and corroborates Ramaisa et al. (2017), who found that information technology has a significant positive effect on strategy formulation.

The results also show that ICT has a significant positive effect on strategic implementation ($R^2 = 0.577$; $\beta = 0.653$; $p = .025 < .05$); the null hypothesis (Ho2) is therefore rejected. This suggests that ICT enhances strategic communication, timely response, and motivated relationships with employees and other stakeholders involved in implementation. This finding is consistent with Dynamic Capability Theory and with Girma and Beshah (2023), who found that ICT adoption significantly and positively affects banks' strategic communication — a core component of implementation.

Finally, the results reveal a significant relationship between ICT and strategic evaluation and control ($R^2 = 0.522$; $\beta = 0.431$; $t = 17.24 > 1.96$; $p = .004 < .05$), leading to the rejection of the null hypothesis (Ho3). This indicates that ICT provides top managers with real-time data for monitoring strategy implementation, identifying deviations, and communicating corrective action. This finding is consistent with Dynamic Capability Theory and aligns with the broader empirical literature (e.g., Ilo, Soyebó & Olaiya, 2024; Fuseini et al., 2024), which links sustained ICT deployment to improved monitoring and performance outcomes in African banking.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the multidimensional relationship between ICT infrastructure and strategic management in the banking industry in Ondo State, and its findings highlight the positive effect of ICT across all phases of strategic management — formulation, implementation, and evaluation and control. The adoption of ICT tools was found to improve strategy formulation, implementation, and evaluation: technology enhances the collection of relevant data for setting goals and policies, strengthens communication, motivation, and information flow between managers and stakeholders during implementation, and enables the timely monitoring, deviation-identification, and corrective action that underpin effective evaluation and control.

These findings are consistent with Dynamic Capability Theory, which links competitive advantage to an organisation's ability to build capabilities by reconfiguring and leveraging its resources through the integration of multiple capabilities. This implies that success in strategic management depends on the extent to which banks integrate ICT tools with human expertise, technical capability, and continuous learning.

5.2 Recommendations

Based on the findings and conclusions of the study, it is recommended that:

Deposit Money Banks should invest adequately in ICT infrastructure to develop the capabilities and competences needed for strategy formulation, and ICT tools should be properly utilised in environmental scanning and analysis so that banks can identify opportunities and respond promptly to threats.

To improve strategy implementation, Deposit Money Banks should integrate their ICT tools with human expertise and technical capability, and provide regular staff training in the use of ICT tools.

To strengthen strategic evaluation, banks should ensure that ICT tools are adequately maintained and properly utilised in monitoring, evaluating, and controlling strategy, thereby facilitating efficient tracking of implementation progress and enabling prompt adjustment of strategy in response to changes in the business environment.

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