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Challenges And Strategies To Enhance Cloud Accounting Systems Deployment For Operational Efficiency Among Deposit Banks In Abia State

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ABSTRACT
This study examined the challenges and strategies for enhancing cloud accounting systems deployment for operational efficiency among deposit banks in Abia State, Nigeria. A descriptive survey research design was adopted. The population comprised staff of selected deposit banks in Abia State, while 251 bank staff were targeted and 246 valid responses were obtained, representing a 98% response rate. Data were collected using a structured questionnaire and analysed using frequency counts, percentages, mean and standard deviation, with a criterion mean of 2.50. The findings revealed that major challenges to cloud accounting deployment include low internet connectivity (M = 3.62), data-security concerns (M = 3.55), poor internet bandwidth (M = 3.41), low digital skills among staff (M = 3.41), high cost of IT infrastructure (M = 3.38), inadequate staff motivation (M = 3.37), unstable power supply (M = 3.34), and high staff turnover (M = 3.28). The study further established that providing high internet bandwidth (M = 3.69), adequate staff motivation (M = 3.68), stable power supply through generators or solar energy (M = 3.65), standard internet connectivity (M = 3.62), job security (M = 3.55), staff training (M = 3.45), data-security measures (M = 3.41), and supportive cloud-accounting policies (M = 3.38) are appropriate strategies. The study concludes that effective cloud accounting deployment requires simultaneous attention to digital infrastructure, employee capability, cybersecurity, power reliability and organisational support. Deposit banks should ensure that there is high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation.
Keywords: Cloud accounting, operational efficiency, deposit banks, digital infrastructure, cybersecurity.

INTRODUCTION
The rapid digital transformation of the banking industry has fundamentally altered how financial institutions process transactions, manage accounting information, monitor risks and make operational decisions. Cloud computing has emerged as an important component of this transformation because it enables organisations to access computing resources, applications and data through networked infrastructure without relying exclusively on locally installed systems. Within accounting environments, cloud accounting systems extend these capabilities by enabling real-time financial-data processing, automated reporting, remote accessibility, information sharing and integration with other organisational systems. These capabilities are particularly relevant to banking institutions, where high transaction volumes, stringent reporting requirements and the need for timely financial information make the quality and availability of accounting information central to operational effectiveness (Mell & Grance, 2011; Marston et al., 2011). Recent evidence from Nigeria also suggests that cloud accounting practices can

influence dimensions of bank performance including financial effectiveness, internal operational processes, customer satisfaction and employee productivity, thereby reinforcing the strategic relevance of cloud-enabled accounting infrastructure to contemporary banking operations (Uche-Udo et al., 2026).

The relevance of cloud accounting to banking is further strengthened by the increasing demand for operational efficiency within Nigeria's financial-services industry. Operational efficiency encompasses the ability of banks to process transactions accurately and rapidly, minimise unnecessary costs, optimise employee productivity, strengthen internal controls and make timely decisions based on reliable information. The Central Bank of Nigeria (CBN) has recognised that weaknesses in banking information-technology infrastructure, including complex and duplicated processes, non-standard systems, inefficient electronic information exchange and data-integrity problems, can constrain operating efficiency and cost effectiveness. Consequently, the CBN's IT standards emphasise enterprise architecture, information management, systems integration, IT security, service management and workforce capabilities as critical components of effective technology utilisation in the banking industry (Central Bank of Nigeria [CBN], 2025).

Cloud accounting systems potentially address several of these operational constraints by creating an integrated environment in which accounting data can be captured, processed, stored and accessed across authorised organisational units. Unlike conventional accounting infrastructures that may depend heavily on locally installed applications and institution-specific hardware, cloud-based systems can support scalability, remote access, automated updates, data integration and collaborative financial reporting. For deposit banks, these capabilities may improve the speed of reconciliations, financial reporting, transaction monitoring, budgeting, audit trails and management reporting while reducing duplication of accounting information. The broader cloud-adoption literature similarly identifies technological and organisational factors such as interoperability, perceived usefulness, security, organisational readiness, user expectations and external environmental conditions as important considerations influencing successful cloud-accounting adoption (Alshamaila et al., 2013; Marston et al., 2011; Pratama et al., 2023).

However, the potential operational benefits of cloud accounting do not imply that deployment will automatically produce efficiency gains. Cloud-based accounting represents a socio-technical transformation that requires appropriate technological infrastructure, organisational capabilities, employee competencies, governance mechanisms and regulatory compliance. System interoperability is particularly important because accounting applications in deposit banks must interact effectively with core banking platforms, payment systems, customer databases, regulatory reporting applications and other enterprise technologies. Poor interoperability can create fragmented databases, duplicate data entry and reconciliation difficulties, potentially reproducing the very inefficiencies that cloud accounting is expected to eliminate. Existing research on cloud adoption identifies interoperability, organisational preparedness, technological complexity, knowledge gaps and contractual concerns among the factors that can hinder effective migration to cloud environments (Khan & Al-Yasiri, 2016; Pratama et al., 2023).

Security and privacy constitute another critical challenge, particularly because deposit banks process highly sensitive financial and personal information. Cloud deployment potentially expands the technological environment within which accounting information is stored and processed, thereby increasing the importance of identity management, access controls, encryption, vulnerability management, incident response and third-party risk management. The CBN's cybersecurity framework emphasises the need for financial institutions to protect the confidentiality, integrity and availability of information assets while addressing evolving threats such as phishing, ransomware and distributed denial-of-service attacks. The regulatory emphasis on cybersecurity demonstrates that cloud accounting deployment in Nigerian banks cannot be evaluated solely in terms of technological convenience or cost reduction; it must also be assessed in relation to information security, operational resilience and institutional risk management (CBN, 2024).

Regulatory compliance and governance therefore represent additional dimensions of the cloud-accounting challenge. Deposit banks operate within a highly regulated environment in which accounting information

must satisfy requirements relating to financial reporting, auditability, data protection, cybersecurity, risk management and regulatory reporting. The CBN's IT standards place considerable emphasis on IT governance, information management, security, service management, business continuity and workforce capabilities, while its governance model requires financial institutions and external IT service providers to comply with relevant industry standards (CBN, 2025). Furthermore, CBN operational guidance requires appropriate controls over technology risks, security measures, incident management and data-breach procedures. Consequently, banks considering cloud accounting deployment need governance arrangements capable of monitoring both internal technology controls and risks arising from external cloud-service providers.

The Nigerian context also introduces infrastructural and human-capital considerations that may influence the effectiveness of cloud accounting deployment. Cloud accounting is fundamentally dependent on reliable connectivity, electricity, appropriate computing infrastructure and employees capable of using and managing cloud-enabled accounting applications. In environments where connectivity interruptions, power instability, inadequate technical support or limited digital competencies exist, the expected benefits of real-time accounting information may not be fully realised. Cloud adoption research consequently highlights technological readiness, organisational resources, employee knowledge and external environmental conditions as interconnected determinants of successful implementation rather than treating cloud migration as a purely technical decision (Marston et al., 2011; Pratama et al., 2023). For banks operating in Abia State, these considerations are particularly important because the effectiveness of cloud accounting must be assessed within the specific institutional and infrastructural realities of the state rather than assumed from evidence generated in technologically different environments.

Another important challenge concerns employee readiness and organisational resistance to technological change. The transition from conventional accounting systems to cloud-based platforms can alter established workflows, responsibilities, reporting procedures and internal-control mechanisms. Employees may resist deployment where they perceive cloud accounting as complex, threatening to existing job roles or difficult to use, while inadequate training may increase errors and reduce confidence in the new system. Successful implementation therefore requires more than procurement of cloud-accounting software; it requires continuous training, user participation, management support, change-management programmes and clearly defined responsibilities. Research on cloud adoption consistently demonstrates that organisational and human factors complement technological considerations in determining whether cloud systems are successfully adopted and utilised (Alshamaila et al., 2013; Low et al., 2011).

Vendor dependence and service continuity also require careful consideration by deposit banks. Cloud accounting typically involves reliance on external service providers for infrastructure availability, software maintenance, technical support and, depending on the deployment arrangement, aspects of data management and security. Such dependence may create concerns regarding service-level agreements, vendor lock-in, data portability, system downtime, technical support, pricing structures and continuity of service. These issues become especially significant in banking because interruptions to accounting and financial-information systems can have implications for transaction processing, reporting, internal control and regulatory compliance. Effective deployment should therefore incorporate rigorous vendor due diligence, clearly defined service-level agreements, data-backup arrangements, exit strategies and business-continuity mechanisms (Marston et al., 2011).

Despite these challenges, strategic deployment of cloud accounting can provide deposit banks with substantial opportunities to strengthen operational efficiency. Integration of accounting systems with other banking applications can reduce repetitive data entry and improve information consistency; automated processing can reduce manual workloads; real-time access can support faster managerial decisions; and scalable cloud infrastructure can enable banks to adjust computing resources to changing operational requirements. The CBN itself identifies improved processing, availability, service quality, enterprise control, risk management, regulatory reporting and business continuity as expected outcomes

of stronger IT utilisation and standards compliance within Nigerian financial institutions (CBN, n.d.-a). Recent empirical evidence involving Nigerian commercial banks further indicates that cloud accounting practices are associated with operational dimensions such as internal processes and employee productivity, suggesting that the technology has practical relevance to banking performance beyond accounting automation alone (Uche-Udo et al., 2026).

Against this background, examining the challenges and strategies for enhancing cloud accounting systems deployment among deposit banks in Abia State is both timely and theoretically relevant. Although existing literature has established the benefits and determinants of cloud-accounting adoption, comparatively limited attention has been directed toward the contextual challenges confronting deposit banks at the subnational level in Nigeria. This creates a need to move beyond the question of whether banks adopt cloud accounting and investigate the conditions under which deployment can translate into measurable operational efficiency. Such an approach is important because technological investment does not necessarily produce organisational value unless infrastructure, human resources, cybersecurity, interoperability, governance and change-management mechanisms are simultaneously addressed. The study therefore focuses on identifying the principal challenges limiting effective cloud accounting systems deployment among deposit banks in Abia State and developing practical strategies capable of strengthening utilisation, resilience, security and operational efficiency.

The study is particularly significant because contemporary banking competitiveness increasingly depends on the capacity of financial institutions to combine technological innovation with effective governance and operational resilience. Nigeria's banking-sector technology standards explicitly recognise strategic IT alignment, governance, information management, security, service management and workforce capabilities as interdependent components of effective IT operations (CBN, 2024). Similarly, recent regulatory attention to cybersecurity and technology risk demonstrates that digital transformation must be accompanied by appropriate safeguards and institutional capabilities (CBN, 2024; CBN, 2026). Thus, understanding the challenges surrounding cloud accounting deployment in Abia State can contribute to the development of evidence-based strategies that enable deposit banks to achieve the dual objectives of technological innovation and operational control.

Objectives of the Study

The main objective of the study is to identify the challenges and strategies to enhance cloud accounting systems deployment for operational efficiency among deposit banks in Abia State. The specific objectives of the study are:

1. Identify the challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State
2. Suggest strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State

Research Questions

The following research questions were formulated to guide the study:

1. What are the challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State?
2. What are the strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State?

REVIEW OF LITERATURE

Cloud accounting refers to the delivery of accounting applications, financial databases and related computing resources through internet-enabled cloud infrastructure rather than through exclusively local servers or desktop installations. The National Institute of Standards and Technology conceptualises cloud computing as a model that provides convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort. Applied to accounting, this model enables financial transactions, ledgers, reconciliations, reporting

and other accounting functions to be processed and accessed through cloud-based platforms. The significance of cloud accounting lies in its capacity to facilitate real-time information access, scalability, automation, remote collaboration and integration with other organisational information systems (Mell & Grance, 2011; Marston et al., 2011).

For deposit banks, cloud accounting should be understood as more than the simple migration of accounting software from physical servers to an external platform. It represents a transformation of the architecture through which financial information is captured, processed, stored, shared and reported. An effectively deployed cloud accounting environment can connect accounting applications with core banking systems, enterprise-resource-planning platforms, payment systems, customer-information systems and regulatory reporting mechanisms. Such integration can potentially reduce duplicated data entry, improve information consistency and accelerate management reporting. However, the benefits depend on appropriate system architecture, interoperability, cybersecurity, governance and user competence (Low et al., 2011; Marston et al., 2011).

Operational efficiency describes an organisation's ability to produce desired outputs with minimum waste of financial, technological, human and material resources. Within banking, it encompasses transaction-processing speed, cost control, employee productivity, accuracy of accounting information, service quality, risk management and the ability to make timely decisions. Cloud accounting may contribute to these dimensions by automating repetitive accounting processes, providing real-time financial information and reducing dependence on fragmented accounting applications. Nevertheless, technology investment alone does not guarantee efficiency because operational benefits depend on the extent to which technological systems are integrated into organisational processes and effectively used by employees (Marston et al., 2011; Low et al., 2011).

In the Nigerian banking environment, operational efficiency is particularly important because deposit money banks depend extensively on information technology for transaction processing, financial reporting, customer services and regulatory compliance. The Central Bank of Nigeria's IT standards emphasise information management, systems integration, IT governance, security, service management, business continuity and human-resource capabilities as important elements of effective IT operations. Consequently, cloud accounting deployment should be assessed not merely according to whether a bank has adopted cloud technology, but according to whether the technology improves the efficiency, reliability and resilience of accounting and related operational processes (Central Bank of Nigeria [CBN], 2024). Cybersecurity represents one of the most significant challenges to cloud accounting deployment in deposit banks because accounting platforms process highly sensitive financial, customer and institutional information. Cloud environments can expose banks to threats involving unauthorised access, credential compromise, malware, data breaches, insider threats and service disruption. The concern is particularly significant because cloud infrastructure involves greater dependence on network connectivity and third-party service providers. Empirical research on cloud adoption has consistently identified security and privacy concerns as major barriers to organisational adoption and utilisation (Armbrust et al., 2010; Low et al., 2011).

Cloud accounting depends heavily on reliable internet connectivity and electricity. Unlike traditional accounting applications that can sometimes operate locally during connectivity interruptions, cloud-based systems require dependable network access to retrieve and process data. Interruptions can delay accounting activities, prevent users from accessing financial information and potentially affect transaction reconciliation and reporting. This challenge is particularly relevant in developing economies where electricity instability and inconsistent broadband connectivity can undermine the reliability of digital systems (Armbrust et al., 2010; Marston et al., 2011). Deposit banks can address infrastructure constraints through redundant internet connections, alternative network providers, backup power systems, distributed cloud architecture and appropriately designed disaster-recovery arrangements. Banks should also develop business-continuity plans that specify how accounting operations will continue during network or cloud-

service interruptions. The CBN's emphasis on business continuity and operational resilience reinforces the need for banks to integrate infrastructure redundancy into their technology strategies (CBN, 2024).

Interoperability constitutes another important challenge because deposit banks rarely operate accounting systems independently of other information systems. Cloud accounting applications must communicate with core banking platforms, payment systems, customer databases, enterprise applications, payroll systems and regulatory reporting platforms. Legacy applications may use incompatible data structures or interfaces, making integration expensive and technically complex. Research on cloud migration identifies interoperability and legacy-system integration as important challenges that organisations must address when moving applications into cloud environments (Khan & Al-Yasiri, 2016; Fahmideh et al., 2020). Fahmideh et al. (2020), in an empirical study involving experts from different industries, found that migration from legacy systems to cloud platforms involves significant technical and non-technical challenges associated with preparedness, migration activities and organisational capabilities. This finding is particularly relevant to banks because accounting applications may be deeply embedded in legacy banking architectures.

Although cloud computing can reduce expenditure on physical infrastructure, cloud accounting does not necessarily eliminate technology costs. Banks may incur expenditure on migration, data cleansing, integration, cybersecurity, employee training, consulting, vendor subscriptions and system customisation. In addition, recurring subscription and service costs may become significant over time. Cloud-adoption literature identifies economic considerations as important factors in organisational decisions concerning migration to cloud platforms (Marston et al., 2011; Khajeh-Hosseini et al., 2010). Human-resource capability is a critical determinant of cloud-accounting success. Employees accustomed to traditional accounting systems may experience difficulties adjusting to cloud-based workflows, automated processes and new information-security procedures. Inadequate knowledge can result in poor system utilisation, resistance to change, data-entry errors and excessive dependence on external technical personnel. Cloud-adoption research demonstrates that organisational readiness and user capabilities influence the successful utilisation of cloud technologies (Low et al., 2011; Alshamaila et al., 2013).

Cloud accounting may alter established accounting procedures, responsibilities and reporting relationships, thereby creating resistance among employees and managers. Employees may perceive technological transformation as a threat to established roles or may resist systems they perceive as complex. Khajeh-Hosseini et al. (2010) argue that cloud adoption represents an organisational transformation rather than merely a technical decision, because migration changes how computing resources are acquired, managed and consumed. Similar organisational concerns can arise when accounting functions are redesigned around cloud platforms. Cloud accounting increases organisational dependence on cloud-service providers for infrastructure availability, technical support, system updates and, in some models, data management. This dependence creates risks associated with vendor lock-in, service interruptions, price changes, data portability and uncertainty regarding the long-term viability of providers. Khan and Al-Yasiri (2016) identify contractual concerns, cloud knowledge and interoperability among the major challenges associated with cloud adoption. These concerns become more consequential in banking because service interruptions can affect financial reporting and operational continuity.

Lots internal and external challenges affect the adoption of cloud accounting system in deposit banks. Ighosewe, et al. (2024) identified challenges such as poor internet bandwidth, unstable electric power supply, lack of conducive work environment in deposit banks and lack of job security as the major inhibitors of adopting cloud accounting system in deposit banks in Nigeria. Similarly, Tesema (2020) identified challenges such as inadequate security of cloud accounting system, privacy issues, low internet bandwidth and low digital skills due to irregular training. Additionally, Yan (2017) reported challenges such as security concerns of data on the cloud, business security issues, and inadequate technical competency and standards in deposit banks.

Successful cloud accounting deployment requires strategic alignment between technology investment and organisational objectives. Banks should first identify specific accounting and operational processes that

require improvement and then determine how cloud technology can address those problems. A bank-wide cloud strategy should specify implementation priorities, required resources, security arrangements, governance responsibilities, performance indicators and expected operational outcomes. This approach is consistent with the broader cloud-adoption literature, which emphasises organisational preparedness and strategic planning as important conditions for successful migration (Marston et al., 2011; Khajeh-Hosseini et al., 2010).

A phased deployment approach can reduce technological and operational risks. Banks should initially deploy cloud accounting within selected accounting functions or branches before expanding across the organisation. Pilot projects provide opportunities to evaluate system reliability, employee acceptance, cybersecurity controls, integration quality and efficiency outcomes. Evidence from cloud-migration research indicates that insufficient preparedness and poor understanding of migration requirements can contribute to implementation problems, supporting the importance of structured migration planning and testing (Fahmideh et al., 2020).

Training should be treated as an ongoing investment rather than a one-off implementation activity. Banks should develop competency frameworks that identify the cloud-accounting knowledge required by accountants, auditors, managers and IT professionals. Training should combine technical skills with cybersecurity awareness, data-governance practices and troubleshooting capabilities. Continuous training can improve perceived ease of use, employee confidence and system utilisation while reducing resistance to technological change (Low et al., 2011). Banks should develop formal vendor-management frameworks covering provider selection, service-level agreements, security assessment, performance monitoring, data portability and exit management. Vendor performance should be periodically evaluated against measurable indicators such as availability, response time, security incidents, support quality and compliance. This approach reduces the risk that dependence on external providers will undermine operational efficiency or business continuity (Khan & Al-Yasiri, 2016).

The success of cloud accounting should ultimately be evaluated through measurable operational outcomes. Banks should monitor indicators such as accounting-processing time, reconciliation time, reporting turnaround, accounting errors, system downtime, employee productivity, operating costs and user satisfaction. Such indicators allow management to determine whether cloud deployment is actually generating operational value rather than simply increasing technological expenditure. The emphasis on measurable outcomes is particularly important because cloud computing creates value only when technological capabilities are effectively translated into organisational performance (Marston et al., 2011).

The literature reveals that existing cloud-accounting research has generated valuable evidence concerning adoption determinants, operational efficiency, financial performance, security concerns, organisational readiness and technological challenges. However, several gaps remain. First, a substantial proportion of empirical studies focus on SMEs rather than deposit money banks. Second, many studies examine adoption intention or performance without simultaneously examining the specific challenges and strategies required to enhance deployment**.** Third, evidence from Nigeria remains comparatively limited and is concentrated in particular geographical locations and organisational categories. Fourth, there is insufficient empirical evidence specifically addressing deposit banks operating in Abia State**.**

This gap is significant because banking institutions differ fundamentally from SMEs in terms of transaction intensity, cybersecurity exposure, regulatory requirements, system integration and operational resilience. Moreover, the CBN's current cybersecurity requirements place specific obligations on deposit money banks, meaning that findings from general business organisations cannot automatically be transferred to the banking sector. Therefore, an empirical study focusing specifically on the challenges and strategies for enhancing cloud accounting deployment among deposit banks in Abia State can make a meaningful contribution by generating context-specific evidence on the technological, organisational, human, infrastructural, security and regulatory conditions that determine whether cloud accounting produces operational-efficiency gains.

Theoretical Framework

The literature also supports the relevance of the Technology Acceptance Model (TAM), particularly in explaining employee-level adoption and utilisation. Perceived usefulness and perceived ease of use influence users' attitudes and behavioural intentions toward technology, suggesting that employees are more likely to utilise cloud accounting effectively when they believe it improves their work and is relatively easy to operate (Davis, 1989). However, TAM alone may be insufficient for the present study because it concentrates primarily on individual acceptance and does not adequately capture cybersecurity, regulatory, infrastructure, vendor and organisational challenges. Consequently, combining technological, organisational and user-level perspectives provides a more comprehensive basis for understanding cloud-accounting deployment.

RESEARCH METHODS

Descriptive research design was adopted for the study. Descriptive survey research design aims at collecting data on and describing it in a systematic manner, the characteristics, features or facts about a given population (Nworgu, 2015). The descriptive survey was considered suitable because this study seeks to collect, describe and summarize empirical data on the deployment of cloud accounting systems for Operational Efficiency among Deposit Banks in Abia State. The population of the study consists of entire staff of the commercial banks in Abia State. Sample of 251 staff of the commercial banks were surveyed using online structured questionnaire via Google Form. These banks are Access Bank, First Bank, Guaranty Trust Bank, Union Bank, UBA, Zenith Bank and First City Monument Bank. The questionnaire was titled "Deployment of cloud accounting systems for Operational Efficiency among Deposit Banks Questionnaire" the questionnaire was divide into two clusters, with a total of 20 items, where cluster 1 has 9 items, while cluster 2 has 11 items. The questionnaire was structured using four-point scale. Data collected were coded into SPSS version 22 and analyzed using frequency count, percentage, mean and standard deviation. To accept an item, its mean will be equal to (=), or greater (>) than the criterion mean of 2.50, thus any mean less than 2.50 will be rejected.

RESULTS

The results of the study was presented using tables, a total of 246 responses were received using Google form from the bankers in the selected banks in Abia State, which represent 98% response rate.

Table 1: Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	92	37.4
Female	154	62.6
Total	**246**	**100.0**

Data in table 1 shows that, majority of the bankers, 154(62.6) were female, while 92(37.4%) were male.

Research Question 1: *What are the challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State?*

Table 2: Mean and Standard Deviation of the Responses of Bankers on the challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State

S/N	Challenges	SA	A	D	SD	$\bar{x}$	St.D	Decision
1	Low internet connectivity,	187	33	17	9	3.62	.772	Accepted
2	Security of data,	153	76	17	0	3.55	.622	Accepted
3	Poor internet bandwidth	128	101	8	9	3.41	.728	Accepted
4	Low digital skills among staff	126	94	26	0	3.41	.674	Accepted
5	High cost of IT infrastructure	119	110	8	9	3.38	.722	Accepted
6	Inadequate motivation of bank staff	126	103	17	0	3.37	.807	Accepted
7	unstable power supply	135	60	51	0	3.34	.801	Accepted
8	High rate of staff turnover	128	84	8	26	3.28	.950	Accepted
9	High cost of maintenance of IT infrastructure	76	110	52	8	3.03	.807	Accepted
	Grand Mean					**3.38**	**0.76**	**Accepted**

SA = Strongly Agree; **A** = Agree; **D** = Disagree; **SD** = Strongly Disagree

Table 2 shows that the major challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State are Low internet connectivity, with 3.62mean score; Security of data, with 3.55 mean score; Poor internet bandwidth, with 3.41 mean score; Low digital skills among staff, with 3.41 mean score; High cost of IT infrastructure, with 3.38 mean score; Inadequate motivation of bank staff, with 3.37 mean score; unstable power supply, with 3.34 mean score and High rate of staff turnover, with 3.28 mean score.

Research Question 3: *What are the strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State?*

Table 3: Mean and Standard Deviation of the Responses of Bankers on the strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State

S/N	Strategies	SA	A	D	SD	$\bar{x}$	St.D	Decision
1	Provision of high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation.	169	77	0	0	3.69	.465	Accepted
2	Adequate motivation of bank staff to boast their morale	195	33	9	9	3.68	.715	Accepted
3	Provision of stable power supply through standby generator or solar energy	161	85	0	0	3.65	.477	Accepted
4	Provision of standard internet connectivity within the ban environment	170	59	17	0	3.62	.612	Accepted
5	Ensure job security for staff	153	76	17	0	3.55	.622	Accepted
6	Training of bank staff on online data security and privacy to reduce cases of online criminal activities on customers data	127	102	17	0	3.45	.622	Accepted
7	Training of bank staff on required digital skills	136	93	8	9	3.45	.731	Accepted
8	Security of data,	119	110	17	0	3.41	.618	Accepted
9	Formulate policy supporting deployment of cloud accounting system in Banks	135	86	8	17	3.38	.847	Accepted
	Grand Mean					**3.54**	**0.63**	**Accepted**

SA = Strongly Agree; **A** = Agree; **D** = Disagree; **SD** = Strongly Disagree

Data in table 3 shows that the major strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State are Provision of high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation, with 3.69 mean score; Adequate motivation of bank staff to boast their morale, with .68 mean score; Provision of stable power supply through standby generator or solar energy, with 3.65 mean score; Provision of standard internet connectivity within the ban environment, with 3.62 mean score; Ensure job security for staff, with 3.55 mean score; Formulate policy supporting deployment of cloud accounting system in Banks, and Training of bank staff on required digital skills with 3.45 mean score. The grand mean of 3.54 indicates that the strategies are very appropriate in enhancing the deployment of cloud accounting system in deposit banks in Abia State

DISCUSSION OF THE FINDINGS

The study showed that the major challenges associated with the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State are low internet connectivity, security of data, poor internet bandwidth, low digital skills among staff, high cost of IT infrastructure, inadequate motivation of bank staff, unstable power supply, and high rate of staff turnover. This is in accordance with that of Ighosewe, et al. (2024) whose findings identified challenges such as poor internet bandwidth, unstable electric power supply, lack of conducive work environment in deposit banks and lack of job security as the major inhibitors of adopting cloud accounting system in deposit banks in Nigeria. Also the findings of the study correspond with that of Tesema (2020) who identified challenges such as inadequate security of cloud accounting system, privacy issues, low internet bandwidth and low digital skills due to irregular training.

The findings of the study revealed that the major strategies to enhance the deployment of cloud accounting systems for Operational Efficiency in Deposit Banks in Abia State are Provision of high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation, Adequate motivation of bank staff to boast their morale, Provision of stable power supply through standby generator or solar energy, Provision of standard internet connectivity within the ban environment, Ensure job security for staff, Formulate policy supporting deployment of cloud accounting system in Banks, and Training of bank staff on required digital skills. These strategies relates to the suggestions of Idris, Audu and Abiola (2022) that management of the deposit banks in Kogi state should ensure that telecommunication infrastructure are installed to ensure smooth adoption of cloud accounting system for their operations.

CONCLUSION

The study concludes that cloud accounting systems have considerable potential to strengthen operational efficiency among deposit banks in Abia State, but their effective deployment is constrained by a combination of technological, infrastructural, human-resource and organisational challenges. The empirical findings demonstrate that low internet connectivity constituted the most prominent challenge, followed by data-security concerns, poor internet bandwidth, inadequate digital skills among bank staff, high IT infrastructure costs, inadequate staff motivation, unstable electricity supply, and high staff turnover. The overall grand mean confirms that these factors represent substantial challenges to effective cloud accounting deployment. The findings further demonstrate that addressing these challenges requires a coordinated rather than isolated intervention. The highest-rated strategy was the provision of high internet bandwidth within banks, followed by adequate staff motivation, stable electricity through standby generators or solar energy, standard internet connectivity, job security, staff training, strengthened data security, and supportive policies for cloud accounting deployment. The overall grand mean indicates strong agreement among respondents that these strategies are appropriate for improving cloud accounting deployment in deposit banks in Abia State.

Therefore, the study concludes that successful cloud accounting deployment should not be viewed merely as the acquisition of cloud-based accounting technology. Rather, it should be approached as an integrated organisational transformation requiring reliable digital infrastructure, resilient power supply, cybersecurity safeguards, continuous staff development, employee motivation, job security and supportive institutional policies. When these conditions are adequately addressed, deposit banks in Abia State can improve the reliability, accessibility and timeliness of accounting information and enhance the efficiency of their operational processes. The study consequently affirms that overcoming infrastructural and human-capital constraints is fundamental to translating cloud accounting investment into sustainable operational efficiency.

RECOMMENDATIONS

The following recommendations were suggested:

1. Deposit banks should ensure that there is high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation.
2. There is also need to train their staff on online data security and privacy to reduce cases of online criminal activities on customers' data.
3. Deposit banks should provide high internet bandwidth within the bank for their staff to effectively use cloud accounting system for their operation,
4. Deposit banks should motivate their staff to boast their morale
5. Deposit banks should provide stable power supply through standby generator or solar energy.

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