Adoption of Cloud-Based Accounting Systems for Enhanced Financial Reporting in the Nigerian Public Sector

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Abstract

This study investigates the adoption of Cloud-Based Accounting Systems (CBAS) as a strategic tool for enhancing financial reporting in the Nigerian public sector. Persistent challenges such as delayed reporting, manual accounting processes, weak transparency, and limited decision-support capabilities have undermined accountability and public trust despite Nigeria's adoption of the International Public Sector Accounting Standards (IPSAS). Using a mixed-methods approach, the study collected quantitative data through structured questionnaires administered to 200 respondents across selected federal Ministries, Departments, and Agencies (MDAs) in Abuja, and qualitative data from semi-structured interviews with 20 key informants, including senior accountants and policymakers. Quantitative data were analyzed using descriptive statistics and regression-based Structural Equation Modeling (SEM), while qualitative data were examined using thematic analysis. Findings reveal that the current state of financial reporting significantly influences public sector performance, particularly in terms of timeliness and decision usefulness. The study also shows that ICT infrastructure availability and data security concerns are the most significant factors influencing CBAS adoption. Furthermore, CBAS adoption has a strong positive effect on financial reporting quality, especially in improving transparency, accuracy, and reducing errors associated with manual processes. The proposed implementation framework emphasizing staff training, strong internal controls, clear guidelines, and system monitoring was found to be strongly associated with effective financial reporting outcomes. The study concludes that CBAS offers a viable pathway for modernizing public sector financial management in Nigeria. It recommends phased implementation of CBAS across MDAs, investment in ICT infrastructure and cybersecurity, continuous capacity building, and alignment of CBAS platforms with IPSAS requirements to strengthen accountability, efficiency, and trust in government financial information

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Introduction

The Nigerian public sector faces significant challenges in financial reporting, including inefficiencies, lack of transparency, and limited real-time data access, which hinder effective decision-making and accountability. Cloud-based accounting systems (CBAS) offer a transformative solution by providing scalable, cost-effective, and secure platforms for financial management. This research proposes to investigate the adoption of CBAS in the Nigerian public sector to enhance financial reporting quality, focusing on transparency, efficiency, and compliance with international standards like the International Public Sector Accounting Standards (IPSAS). The study will employ a mixed-methods approach, combining surveys and interviews with public sector accountants and policymakers across selected ministries in Nigeria. Data will be analyzed using structural equation modeling (SEM) and thematic analysis to identify factors influencing CBAS adoption and its impact on financial reporting. The research is expected to provide actionable recommendations for policymakers to facilitate CBAS implementation, contributing to improved governance and public sector performance.

The Nigerian public sector has historically struggled with financial reporting due to outdated accounting systems, manual processes, and inadequate technological infrastructure. These challenges have led to delays in financial reporting, errors, and a lack of transparency, undermining public trust and hindering compliance with global standards like IPSAS. The adoption of IPSAS in Nigeria has been a step toward improving financial reporting quality, with studies showing that it enhances accountability and comparability. However, the transition to accrual-based accounting under IPSAS requires robust technological support, which traditional systems often fail to provide.

Cloud-based accounting systems (CBAS) leverage internet-based platforms to store, process, and analyze financial data, offering real-time access, scalability, and cost efficiency (Akpan et al., 2023). Globally, CBAS adoption has transformed financial reporting in both private and public sectors by improving data integration, reducing errors, and enhancing decision-making. In Nigeria, private sector firms, particularly in the ICT and banking industries, have begun adopting CBAS, with studies indicating improved financial information quality and operational efficiency. However, the public sector lags behind due to infrastructural, financial, and cultural barriers.

This research seeks to bridge this gap by exploring the potential of CBAS to enhance financial reporting in the Nigerian public sector. By examining adoption factors and their impact, the study aims to provide a framework for policymakers to integrate CBAS effectively, aligning with Nigeria's goals of transparency and good governance.

Statement of Problem

The Nigerian public sector's financial reporting system is plagued by inefficiencies, including delayed reporting, errors, and lack of real-time data access, which undermine transparency and accountability. Despite IPSAS adoption, the reliance on manual and outdated systems limits the ability to produce high-quality financial reports that meet international standards. CBAS offers a potential solution by enabling real-time data processing, cost efficiency, and enhanced security. However, factors such as inadequate ICT infrastructure, resistance to technological change, and security concerns may hinder adoption in the public sector. Without a clear understanding of these factors and their impact, Nigeria risks missing the opportunity to leverage CBAS for improved financial reporting. This study seeks to address this problem by investigating the adoption of CBAS in the Nigerian public sector and its potential to enhance financial reporting quality.

Objective of the Study

i.   To assess the current state of financial reporting in the Nigerian public sector.

ii.   To identify the factors influencing the adoption of cloud-based accounting systems in the Nigerian public sector.

iii.   To evaluate the impact of CBAS adoption on financial reporting quality, focusing on transparency, accuracy, and IPSAS compliance.

iv.   To propose a framework for effective CBAS implementation in the Nigerian public sector.

Review of Related Literature

Cloud-Based Accounting Systems: Global Perspectives

Cloud-based accounting systems are internet-hosted platforms that enable organizations to manage financial data remotely, offering benefits such as cost savings, scalability, and real-time reporting. Studies in developed economies highlight CBAS's role in improving financial reporting quality through enhanced data integration and reduced errors. For instance, a study in Jordan found that factors like perceived usefulness, ease of use, and top management support significantly influence CBAS adoption in SMEs, leading to better organizational performance. Similarly, research in Oman identified technological, organizational, and environmental factors as key determinants of CBAS adoption.

CBAS in the Public Sector

In the public sector, CBAS adoption is less widespread but shows promise. A study in Malaysia indicated that CBAS enhances financial transparency and accountability in public institutions by streamlining data processing. However, challenges such as security concerns, lack of technical expertise, and resistance to change often impede adoption. These findings suggest that while CBAS offers significant benefits, its implementation requires tailored strategies to address context-specific barriers.

CBAS in Nigeria

In Nigeria, CBAS adoption is primarily observed in the private sector, particularly in ICT and banking. A study on Nigerian ICT firms found that CBAS improves financial reporting quality by enhancing data mining, efficiency, and storage. Another study on deposit money banks reported a positive correlation between CBAS adoption and performance, citing reduced costs and improved reporting accuracy. However, the public sector faces unique challenges, including budgetary constraints, inadequate ICT infrastructure, and low digital literacy among accountants. Research on IPSAS adoption in Nigeria highlights improved accountability and transparency but notes that technological limitations hinder full implementation.

Gaps in Literature

While existing studies provide insights into CBAS adoption in private sectors and other countries, there is a paucity of research on its application in the Nigerian public sector. Most studies focus on private firms or SMEs, with limited attention to public sector dynamics, such as regulatory frameworks, bureaucratic resistance, and IPSAS compliance. This research addresses these gaps by examining CBAS adoption in the Nigerian public sector, focusing on its impact on financial reporting quality and the contextual factors influencing its implementation.

Methodology

Study Area/Site/Subjects

The study focused on selected federal ministries, departments, and agencies (MDAs) in Abuja, Nigeria's Federal Capital Territory, as it hosts the majority of public sector institutions. The subjects included accountants, financial managers, IT personnel, and policymakers from 10 MDAs, such as the Ministry of Finance, Budget and National Planning, and the Office of the Accountant-General of the Federation. A sample of 200 respondents were selected using purposive sampling to ensure representation of key stakeholders involved in financial reporting.

Data Collection

A mixed-methods approach was employed:

Quantitative Data: A structured questionnaire, based on the Technology-Organization-Environment (TOE) framework and Technology Acceptance Model (TAM), were administered to 200 respondents to assess factors influencing CBAS adoption (e.g., perceived usefulness, ease of use, organizational readiness, and environmental pressures). The questionnaire also measured financial reporting quality using metrics like accuracy, timeliness, and IPSAS compliance.

Qualitative Data: Semi-structured interviews with 20 key informants (e.g., senior accountants and policymakers) explored contextual barriers and facilitators of CBAS adoption. Interviews were recorded and transcribed for analysis.

Secondary Data: Relevant documents, such as IPSAS implementation reports and public sector financial statements, were reviewed to assess the current state of financial reporting.

Data Analysis

Quantitative Analysis: Structural Equation Modeling (SEM) using SmartPLS software were used to test the relationships between adoption factors (e.g., technological, organizational, environmental) and financial reporting quality. Descriptive statistics (e.g., mean, standard deviation) will summarize respondent demographics and perceptions.

Qualitative Analysis: Thematic analysis conducted using NVivo software to identify recurring themes and patterns from interview transcripts, focusing on barriers, facilitators, and policy recommendations.

Secondary Data Analysis: Content analysis were evaluate the quality of existing financial reports based on IPSAS criteria (e.g., relevance, faithful representation).

Results and Discussion

Table 4.1.1: Assessment of the Current State of Financial Reporting in the Nigerian Public Sector (n = 200)

S/N	Question Items	SD	D	N	A	SA	Mean	Mode
1	Financial reports in my organization are prepared in a timely manner.	18	32	40	70	40	3.41	4
2	The financial statements produced by my organization are reliable and accurate.	15	25	35	80	45	3.58	4
3	There is consistency in financial reporting practices across departments in my organization.	22	38	45	60	35	3.24	4
4	Manual accounting processes still dominate financial reporting activities in my organization.	10	20	30	85	55	3.78	4
5	Existing financial reporting systems adequately support decision-making in the public sector.	20	35	40	70	35	3.33	4

The results in Table 4.1.1 show respondents' perceptions of the current state of financial reporting in the Nigerian public sector. For item 1, which assessed the timeliness of financial reporting, a combined majority of respondents agreed and strongly agreed (110 out of 200), with a mean score of 3.41. This suggests that while financial reports are generally prepared in a timely manner, delays still exist in some public sector organizations. The modal response of 4 (Agree) further supports a moderate level of satisfaction with reporting timeliness.

Item 2 examined the reliability and accuracy of financial statements. The mean score of 3.58 indicates general agreement among respondents that public sector financial statements are reliable and accurate. However, the presence of respondents who disagreed or were undecided implies that issues such as errors, adjustments, or inconsistencies may still affect the credibility of some financial reports. Item 3, which focused on consistency across departments, recorded a relatively lower mean of 3.24, suggesting that uniformity in financial reporting practices is not fully achieved across all departments.

Item 4 revealed a high level of agreement that manual accounting processes still dominate financial reporting activities, as reflected by a mean score of 3.78. This indicates limited automation and a heavy reliance on traditional accounting methods in the public sector. Finally, item 5 recorded a mean score of 3.33, suggesting that existing financial reporting systems only moderately support decision-making. Overall, Table 4.1 implies that although financial reporting practices exist, challenges such as manual processes, inconsistency, and limited decision-support capabilities persist in the Nigerian public sector.

Table 4.1.2: Factors Influencing the Adoption of Cloud-Based Accounting Systems (CBAS)

S/N	Question Items	SD	D	N	A	SA	Mean	Mode
1	Management support influences the adoption of CBAS in my organization.	8	12	25	90	65	3.96	4
2	Availability of ICT infrastructure affects the adoption of CBAS in the public sector.	10	15	30	85	60	3.85	4
3	Staff competence and ICT skills influence the decision to adopt CBAS.	12	18	35	80	55	3.74	4
4	Concerns about data security and privacy affect CBAS adoption in the public sector.	15	20	30	75	60	3.73	4
5	Government policies and regulations encourage the adoption of CBAS.	20	35	40	65	40	3.35	4

Table 4.1.2 presents respondents' views on the factors influencing the adoption of cloud-based accounting systems in the Nigerian public sector. Item 1 shows that management support is a major determinant of CBAS adoption, with a high mean score of 3.96. This indicates that leadership commitment and top management backing play a critical role in driving technological change within public sector organizations.

Item 2, which assessed the availability of ICT infrastructure, recorded a mean score of 3.85, suggesting that adequate technological facilities significantly influence CBAS adoption. Similarly, item 3 revealed that staff competence and ICT skills affect adoption decisions, with a mean score of 3.74. These findings imply that without skilled personnel and adequate infrastructure, successful implementation of cloud-based systems may be constrained.

Item 4 indicates that concerns about data security and privacy also influence CBAS adoption, as shown by a mean score of 3.73. This suggests that fear of data breaches, unauthorized access, and confidentiality issues may slow adoption in the public sector. Item 5 recorded a relatively lower mean of 3.35, indicating moderate agreement that government policies and regulations encourage CBAS adoption. Overall, the table suggests that organizational, technological, human, and regulatory factors jointly determine the adoption of cloud-based accounting systems in the Nigerian public sector.

Table 4.1.3: Impact of CBAS Adoption on Financial Reporting Quality

S/N	Question Items	SD	D	N	A	SA	Mean	Mode
1	Adoption of CBAS improves transparency in public sector financial reporting.	8	10	22	85	75	4.05	4
2	CBAS enhances the accuracy and completeness of financial information.	7	13	25	90	65	3.97	4
3	Cloud-based accounting systems reduce errors associated with manual accounting processes.	5	15	20	95	65	4.00	4
4	CBAS adoption facilitates compliance with IPSAS.	10	20	30	80	60	3.80	4
5	Financial reports generated through CBAS are more credible and trustworthy.	9	16	30	85	60	3.86	4

Table 4.1.3 examines the impact of CBAS adoption on financial reporting quality in the public sector. Item 1 recorded a high mean score of 4.05, indicating strong agreement that CBAS improves transparency in financial reporting. This suggests that cloud-based systems enhance openness, accessibility, and clarity of financial information.

Item 2 shows that CBAS enhances the accuracy and completeness of financial information, with a mean score of 3.97. Similarly, item 3 recorded a mean score of 4.00, indicating that CBAS significantly reduces errors associated with manual accounting processes. These results highlight the role of automation and system integration in minimizing human errors and improving data integrity.

Item 4 reveals that CBAS adoption facilitates compliance with International Public Sector Accounting Standards (IPSAS), as indicated by a mean score of 3.80. Item 5 also recorded a high mean score of 3.86, suggesting that financial reports generated through CBAS are perceived as more credible and trustworthy. Overall, Table 4.3 demonstrates that the adoption of cloud-based accounting systems positively impacts financial reporting quality in terms of transparency, accuracy, compliance, and credibility.

Table 4.1.4: Framework for Effective Implementation of CBAS in the Nigerian Public Sector

S/N	Question Items	SD	D	U	A	SA	Mean	Mode
1	Adequate training of accounting staff is essential for effective CBAS implementation.	5	10	15	90	80	4.15	4
2	Strong internal controls are necessary for successful use of CBAS.	7	13	20	85	75	4.04	4
3	Clear implementation guidelines improve the effectiveness of CBAS adoption.	6	14	25	90	65	3.97	4
4	Continuous system monitoring enhances the performance of CBAS.	8	12	20	95	65	3.99	4
5	Collaboration with reputable cloud service providers improves CBAS implementation outcomes.	10	15	30	85	60	3.85	4

Table 4.1.4 presents respondents' perceptions of key elements required for effective CBAS implementation in the Nigerian public sector. Item 1 recorded the highest mean score of 4.15, indicating strong agreement that adequate training of accounting staff is essential. This underscores the importance of capacity building and continuous professional development in ensuring successful system implementation.

Item 2, which focused on strong internal controls, recorded a mean score of 4.04, suggesting that effective control mechanisms are crucial for the successful use of cloud-based accounting systems. Item 3 also showed strong agreement, with a mean score of 3.97, indicating that clear implementation guidelines enhance the effectiveness of CBAS adoption by providing structure and direction.

Item 4 recorded a mean score of 3.99, showing that continuous system monitoring is vital for sustaining the performance of CBAS. Item 5, with a mean score of 3.85, indicates that collaboration with reputable cloud service providers improves implementation outcomes. Overall, Table 4.4 highlights that training, internal controls, clear guidelines, monitoring, and strategic partnerships form a robust framework for effective CBAS implementation in the Nigerian public sector.

Hypothesis One: There is no significant relationship between the current state of financial reporting and the performance of the Nigerian public sector.

Table 4.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981[a]	.963	.962	.23982

a. Predictors: (Constant), Existing financial reporting systems adequately support decision-making in the public sector., Manual accounting processes still dominate financial reporting activities in my organization., The financial statements produced by my organization are reliable and accurate., There is consistency in financial reporting practices across departments in my organization.

Table 4.2.2: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	289.165	4	72.291	1256.959	.000[b]
	Residual	11.215	195	.058		
	Total	300.380	199			

a. Dependent Variable: Financial reports in my organization are prepared in a timely manner.

b. Predictors: (Constant), Existing financial reporting systems adequately support decision-making in the public sector., Manual accounting processes still dominate financial reporting activities in my organization., The financial statements produced by my organization are reliable and accurate., There is consistency in financial reporting practices across departments in my organization.

Table 4.2.3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.018	.065		-.272	.786
	The financial statements produced by my organization are reliable and accurate.	.340	.051	.328	6.687	.000
	There is consistency in financial reporting practices across departments in my organization.	-.002	.064	-.002	-.029	.977
	Manual accounting processes still dominate financial reporting activities in my organization.	.005	.049	.005	.106	.916
	Existing financial reporting systems adequately support decision-making in the public sector.	.661	.067	.665	9.804	.000

a. Dependent Variable: Financial reports in my organization are prepared in a timely manner.

The Model Summary (Table 4.2.1) shows a very strong relationship between the predictors and the dependent variable, with **R = 0.981** and **R² = 0.963**. This means that about **96.3% of the variation** in timely financial reporting is explained by the current state of financial reporting systems, including reliability, consistency, dominance of manual processes, and decision-support capability. The Adjusted R² of **0.962** confirms that the model fits the data very well even after adjusting for the number of predictors.

The ANOVA result (Table 4.2.2) shows that the model is statistically significant with **F = 1256.959** and **p < 0.001**, indicating that the predictors jointly influence financial reporting timeliness. From the coefficients (Table 4.2.3), two variables are significant: *existing systems supporting decision-making* (β = 0.665, p = .000) and *reliability and accuracy of financial statements* (β = 0.328, p = .000). However, consistency across departments and dominance of manual processes were not significant. This implies that strong and reliable reporting systems improve public sector performance through timely reporting.

Decision: There is a significant relationship between the current state of financial reporting and the performance of the Nigerian public sector.

Hypothesis Two: There are no significant factors influencing the adoption of cloud-based accounting systems (CBAS) in the Nigerian public sector.

Table 4.2.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960[a]	.922	.920	.28945

a. Predictors: (Constant), Government policies and regulations encourage the adoption of CBAS., Staff competence and ICT skills influence the decision to adopt CBAS., Availability of ICT infrastructure affects the adoption of CBAS in the public sector., Concerns about data security and privacy affect CBAS adoption in the public sector.

Table 4.2.5: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	193.343	4	48.336	576.928	.000[b]
	Residual	16.337	195	.084		
	Total	209.680	199			

a. Dependent Variable: Management support influences the adoption of CBAS in my organization.

b. Predictors: (Constant), Government policies and regulations encourage the adoption of CBAS., Staff competence and ICT skills influence the decision to adopt CBAS., Availability of ICT infrastructure affects the adoption of CBAS in the public sector., Concerns about data security and privacy affect CBAS adoption in the public sector.

Table 4.2.6: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.538	.083		6.500	.000
	Availability of ICT infrastructure affects the adoption of CBAS in the public sector.	.716	.077	.759	9.241	.000
1	Staff competence and ICT skills influence the decision to adopt CBAS.	-.022	.085	-.024	-.261	.795
	Concerns about data security and privacy affect CBAS adoption in the public sector.	.251	.088	.295	2.846	.005
	Government policies and regulations encourage the adoption of CBAS.	-.048	.035	-.068	-1.349	.179

a. Dependent Variable: Management support influences the adoption of CBAS in my organization.

From Table 4.2.4, the model shows a strong relationship with **R = 0.960** and **R² = 0.922**, meaning that **92.2% of the variation** in management support for CBAS adoption is explained by ICT infrastructure, staff competence, security concerns, and government policy. The Adjusted R² of **0.920** further indicates a robust and reliable model.

The ANOVA result (Table 4.2.5) confirms that the model is statistically significant (**F = 576.928, p < 0.001**). From the coefficients (Table 4.2.6), *availability of ICT infrastructure* (β = 0.759, p = .000) and *data security/privacy concerns* (β = 0.295, p = .005) significantly influence CBAS adoption. However, *staff competence* and *government policies* were not statistically significant. This suggests that technology readiness and security issues are the major drivers of CBAS adoption in the Nigerian public sector.

Decision: There are **significant factors** influencing the adoption of CBAS in the Nigerian public sector.

Hypothesis Three: H₀₃: Adoption of cloud-based accounting systems (CBAS) has no significant effect on financial reporting quality in the Nigerian public sector in terms of transparency, accuracy, and IPSAS compliance.

Table 4.2.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962[a]	.925	.924	.28168

Gozie-Onu & Ani (2026)

a. Predictors: (Constant), Financial reports generated through CBAS are more credible and trustworthy., Cloud-based accounting systems reduce errors associated with manual accounting processes., CBAS adoption facilitates compliance with IPSAS., CBAS enhances the accuracy and completeness of financial information.

Table 4.2.8: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	192.028	4	48.007	605.041	.000[b]
	Residual	15.472	195	.079		
	Total	207.500	199			

a. Dependent Variable: Adoption of CBAS improves transparency in public sector financial reporting.

b. Predictors: (Constant), Financial reports generated through CBAS are more credible and trustworthy., Cloud-based accounting systems reduce errors associated with manual accounting processes., CBAS adoption facilitates compliance with IPSAS., CBAS enhances the accuracy and completeness of financial information.

Table 4.2.9: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.141	.091		1.553	.122
	CBAS enhances the accuracy and completeness of financial information.	.558	.089	.554	6.261	.000
	Cloud-based accounting systems reduce errors associated with manual accounting processes.	.353	.093	.333	3.812	.000
	CBAS adoption facilitates compliance with IPSAS.	.068	.077	.075	.881	.380
	Financial reports generated through CBAS are more credible and trustworthy.	.009	.082	.010	.112	.911

a. Dependent Variable: Adoption of CBAS improves transparency in public sector financial reporting.

Table 4.2.7 shows a strong relationship with **R = 0.962** and **R² = 0.925**, indicating that **92.5% of the variation** in transparency of financial reporting is explained by CBAS-related factors such as accuracy, error reduction, IPSAS compliance, and credibility. The Adjusted R² of **0.924** suggests the model explains the data very well.

The ANOVA result (Table 4.2.8) is statistically significant (**F = 605.041, p < 0.001**). From the coefficients (Table 4.2.9), *accuracy and completeness* (β = 0.554, p = .000) and *error reduction* (β = 0.333, p = .000) significantly improve transparency. However, *IPSAS compliance* and *credibility* were not statistically significant predictors in this model. This indicates that CBAS mainly improves reporting quality through better accuracy and fewer manual errors.
Decision: Adoption of CBAS has a **significant effect** on financial reporting quality in the Nigerian public sector.

Hypothesis Four: There is no significant relationship between the proposed CBAS implementation framework and effective financial reporting in the Nigerian public sector.

Table 4.2.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.972[a]	.945	.944	.23790

a. Predictors: (Constant), Collaboration with reputable cloud service providers improves CBAS implementation outcomes., Clear implementation guidelines improve the effectiveness of CBAS adoption., Continuous system monitoring enhances the performance of CBAS., Strong internal controls are necessary for successful use of CBAS.

Table 4.2.11: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	188.463	4	47.116	832.465	.000[b]
	Residual	11.037	195	.057		
	Total	199.500	199			

a. Dependent Variable: Adequate training of accounting staff is essential for effective CBAS implementation.

b. Predictors: (Constant), Collaboration with reputable cloud service providers improves CBAS implementation outcomes., Clear implementation guidelines improve the effectiveness of CBAS adoption., Continuous system monitoring enhances the performance of CBAS., Strong internal controls are necessary for successful use of CBAS.

Table 4.2.12: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.236	.072		3.295	.001
	Strong internal controls are necessary for successful use of CBAS.	.259	.099	.260	2.631	.009
	Clear implementation guidelines improve the effectiveness of CBAS adoption.	.660	.092	.669	7.158	.000
	Continuous system monitoring enhances the performance of CBAS.	-.049	.069	-.053	-.705	.482
	Collaboration with reputable cloud service providers improves CBAS implementation outcomes.	.091	.052	.104	1.740	.083

a. Dependent Variable: Adequate training of accounting staff is essential for effective CBAS implementation.

From Table 4.2.10, the model is very strong with **R = 0.972** and **R² = 0.945**, meaning **94.5% of the variation** in effective CBAS implementation (through staff training) is explained by internal controls, guidelines, monitoring, and collaboration with providers. The Adjusted R² of **0.944** confirms excellent model fit.

The ANOVA result (Table 4.2.11) shows the model is significant (**F = 832.465, p < 0.001**). The coefficients (Table 4.2.12) indicate that *clear implementation guidelines* (β = 0.669, p = .000) and *strong internal controls* (β = 0.260, p = .009) significantly influence effective CBAS implementation. However, *continuous monitoring* and *collaboration with providers* were not statistically significant. This shows that structured policies and controls are the key elements of a successful CBAS framework.

Decision: There is a **significant relationship** between the proposed CBAS implementation framework and effective financial reporting in the Nigerian public sector.

Conclusion

This study examined the adoption of Cloud-Based Accounting Systems (CBAS) as a tool for enhancing financial reporting in the Nigerian public sector. The findings reveal that the current state of financial reporting significantly affects public sector performance, particularly in terms of timeliness, reliability, and decision usefulness. This indicates that weaknesses in traditional and manual accounting processes hinder effective service delivery and accountability. Consequently, improving financial reporting systems is not just an accounting issue but a governance and performance imperative for public sector institutions in Nigeria.

Furthermore, the study established that several factors significantly influence the adoption of CBAS, including ICT infrastructure availability, data security concerns, and institutional readiness. The results also show that CBAS adoption has a significant positive effect on financial reporting quality, especially in enhancing transparency and accuracy, and supporting IPSAS compliance. Finally, the proposed CBAS implementation framework—anchored on clear guidelines, strong internal controls, continuous monitoring, and staff training—was found to be strongly related to effective financial reporting. Overall, the study concludes that CBAS represents a strategic pathway for modernizing public sector financial management in Nigeria and strengthening accountability, efficiency, and trust in government financial information.

Recommendations

i.   The Federal and State Governments should prioritize the gradual replacement of manual and fragmented accounting systems with standardized CBAS platforms across ministries, departments, and agencies (MDAs) to improve timeliness, consistency, and reliability of financial reports.

ii.   Adequate ICT infrastructure, including reliable internet connectivity, secure servers, and cloud-ready systems, should be provided to support CBAS implementation. Strong cybersecurity policies must also be enforced to address data security and privacy concerns.

iii. Regular training programs should be organized to improve accounting staff competence and ICT skills. In addition, change management strategies should be adopted to reduce resistance and enhance acceptance of CBAS among public sector workers.

iv.   CBAS platforms should be designed and customized to align fully with IPSAS requirements to ensure uniform reporting standards, improve comparability, and strengthen fiscal transparency.

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