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# Integrated Financial Accounting Systems and Operation Performance of Deposit Money Banks in Nigeria

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## **Abstract**

The current investigation has examined the perceived impact of integrated financial accounting systems on operational efficacy, management of the general ledger, automation of reconciliation processes, and adherence to regulatory obligations within the Deposit Money Banks of Nigeria. The research employed a descriptive survey methodology to gather primary data; self-administered questionnaires were distributed to 105 senior personnel from finance, accounting, auditing, operational roles, and IT professionals who were randomly selected from 15 Deposit Money Banks (DMBs) across Nigeria. Hypothesis testing was conducted utilizing Covariance-Based Structural Equation Modeling (CB-SEM), the findings of which demonstrate that general ledger management, automation of reconciliation management, and regulatory compliance modules significantly influence operational performance. The analysis revealed a significant relationship between these components, proving that they all acted together to affect operational efficiency. Based on these conclusions, optimization of these systems will yield improvement in efficiency, compliance, and other aspects of performance. It suggested that DMBs invest in further development of these modules and invest in staff training to fully realize their benefits.

**Keywords:** Integrated Financial Accounting, Operational Performance, General Ledger Management, Automated Reconciliation, Regulatory Compliance Modules.

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## **1. Introduction**

Deposit Money Banks' performance globally is influenced by their level of adoption of advanced financial accounting systems and the ability to respond to changing financial regulations (Akinbode et al., 2023). In developed economies like the USA, Spain, China, England, Russia, and France, banks have ensured operational efficiency, risk management, and profitability by facilitating sophisticated systems in general ledger management, automated reconciliation, and regulatory compliance modules (Tsoulas et al., 2020; Almahirah & Salameh., 2021; Akinbode et al., 2023). These technologies have made it possible for banks to process large volumes of transactions, speed up their financial reporting, and implement strict regulatory requirements, maintaining competitiveness and contributing to financial stability. Such indications come from Clement (2021), Mafike and Mawela (2022). However, DMBs in developing countries face technological and infrastructural problems that affect their overall performance. This is observed by Clement (2021). In many of these countries, many banks have adapted integrated financial accounting systems for better functioning and regulatory requirements. Nonetheless, problems regarding inconsistent regulatory frameworks and limited

infrastructure, among other concerns, continue to exist (Eldalabeeh et al., 2021). Even with the hindrances discussed above, growing adoption offers potential in developing financial accuracy and efficiency in the market (Folami et al., 2024).

In Nigeria, DMBs are increasingly adopting systems like General Ledger Management and Automated Reconciliation to meet the regulatory demands of the Central Bank of Nigeria (CBN). These systems promise improved operational efficiency and financial reporting accuracy. However, Nigerian banks face hurdles such as insufficient technological infrastructure and inconsistent implementation, limiting their ability to fully benefit from these systems (Folami, et al., 2024). The performance of banks, for financial stability, improves with addressing these issues through increasing technology adoption, improvement in physical infrastructure, and support from the regulatory framework. According to Oladejo et al. (2020), this work tries to go a step further to show how integrated financial accounting systems facilitate the growth and operational performances of DMBs in Nigeria.

Nigerian banks operate amidst high challenges that emanate from a complex, unfriendly regulatory environment, economic uncertainty, and increasing pressure to enhance efficiency in operations. Inefficiencies in financial reporting, delays in reconciliation, and difficulties in meeting regulatory demands hinder their performance (Jaywardane & Gamlasa, 2020). Integrated financial accounting systems, designed to streamline transactions, improve reporting accuracy, and enhance compliance, offer a potential solution (Kwasau, 2021). However, obstacles such as data entry errors, reconciliation discrepancies, and delays in financial processing persist, impacting decision-making and exposing banks to potential regulatory penalties (Chika et al., 2023). The failure to adequately integrate regulatory compliance modules further complicates compliance with evolving Nigerian standards, exposing banks to legal risks and fines (Sarumi et al., 2023).

The effectiveness of Deposit Money Banks (DMBs) in ensuring financial integrity, operational efficiency, and regulatory compliance depends significantly on the adoption of an ideal integrated financial accounting system (Akinbode et al., 2023). However, Ibrahim (2022) and Chude, et al. (2023) argue that many DMBs in Nigeria face challenges in implementing comprehensive financial accounting practices that seamlessly integrate general ledger management, automated reconciliation, and regulatory compliance modules. By implication, the absence of such an integrated system creates inefficiencies in financial reporting, increases operational risks, and compromises data accuracy.

More critically, Ejiofor (2023), Olaniyi et al. (2023), and Wokeh and Essiet (2023) proclaim that the lack of an ideal financial accounting framework exposes banks to data breaches, fraudulent financial practices, and compliance failures, which can undermine stakeholder confidence and financial stability. Despite the significance of integrated financial accounting systems, existing studies (such as Osakwe et al., 2022; Ogundajo et al., 2023; Sarumi et al., 2022; Chika et al., 2023; Owolabi et al., 2023; Akeni et al., 2024) have not adequately captured or explicitly stated the consequences of their absence in Deposit Money Bank (DMB) operations. This study, therefore, seeks to fill this gap by examining the impact of integrated financial accounting systems on the operational performance of Deposit Money Banks in Nigeria, focusing on general ledger management, automated reconciliation, and regulatory compliance modules in enhancing operational efficiency and regulatory adherence.

This study's outcome highlights the need for policymakers and financial regulators to mandate the adoption of integrated financial accounting systems in Deposit Money Banks (DMBs) to enhance transparency, regulatory compliance, and fraud prevention. Strengthening enforcement mechanisms for financial reporting standards and promoting digital accounting frameworks can improve operational efficiency and financial stability in the banking sector.

## **2. Literature Review**

IFAS is an integrated software package that integrates all the major accounting processes, including the general ledger, accounts payable, accounts receivable, asset management, and financial reporting, into one system. Such integration ensures consistency of financial data across all departments, eliminates redundancy, and reduces errors, thus improving efficiency (Oladejo and Yinusa, 2020; Kosadi et al., 2021). In Nigerian Deposit Money Banks (DMBs), the key components of IFAS include general ledger management, automated reconciliation, financial reporting and analysis, and regulatory compliance modules (Oladejo et al., 2020; Ali and Oudat, 2021; Durodola, 2022). These systems streamline operations by enabling seamless management of financial data, which is essential in addressing the complexities of banking operations, regulatory requirements, and financial controls (de-menzes et al., 2020).

GL management, as noted by Kannengieber, et al. (2020), and Han, et al. (2020), forms the center of an IFAS that aids in recording, classification, and summarization of numerous financial transactions. The outcome is centralization of data from the subledgers that include accounts payable, accounts receivable, and payroll, making it, in essence, the backbone through which key financial statements, such as the balance sheet and income statement are derived. Romney & Steinbart, 2021. In the banking industry, effective GL management ensures accuracy in financial records, especially considering the large volume of transactions (Almahirah & Salameh, 2021). GL systems facilitate better decision-making, liquidity management, and regulatory compliance by enabling real-time financial reporting (Singh & Verma, 2022). A well-organized system of GL management is integrated with other financial processes and enhances the accuracy and transparency of data (Tsoulas et al., 2020).

Automated reconciliation and regulatory compliance modules are equally critical to the effective operation of IFAS. Automated reconciliation tools compare internal financial records with external data, such as bank statements, to identify and resolve discrepancies (Lederer & Pore, 2023). This process helps banks efficiently manage large volumes of transactions, reduces the risk of errors and fraud, and ensures compliance with regulatory requirements (Kumar & Kapoor, 2022). On the other hand, regulatory compliance modules ensure that banks adhere to legal standards, such as Basel III and Anti-Money Laundering (AML) laws, by automating the monitoring and reporting of compliance activities (Pearson & Johnson, 2022). These modules help banks avoid non-compliance penalties, improve operational transparency, and maintain the trust of regulators and customers alike (Wang & Zhang, 2023). These all components together strengthen the operational efficiency and regulatory compliance for Nigerian DMBs.

### **2.1 Operational Performance**

Operational performance is an organization's capability to control its resources effectively to achieve its goals. Operational performance, therefore, may relate to how best the enhancement of processes, systems, and capabilities can effectively enable the creation of value for its stakeholders with minimum waste and disruption to service (Durodola, 2022). Some KPIs that represent the meaning of operational performance are: efficiency, productivity, quality, cost control, service delivery, and customer satisfaction. According to Akanbi, 2023; Kelvin-Iloafu et. al., 2023, a high level of operational performance would mean that a company optimally exploits available resources, develops better productivity, and accomplishes its strategic objectives without facing many operational problems.

In the banking industry, operational performance encompasses how well a bank manages its day-to-day activities, controls operational risks, and generates revenue through the efficient use of its resources (Mbunji, 2024). This involves the management of customer deposits, loan portfolios, investment activities, and strict adherence to regulatory standards (Mbunji, 2024). Since banks are service-based, the success of their operations heavily relies on how efficiently

they are able to process transactions, manage the various financial products, and control their risks while ensuring customer satisfaction and profitability (Mjojo, A. 2021; Ibrahim, 2022).

## **2.2 Theoretical Framework**

### **2.2.1 Resource Based Theory**

Resource-Based Theory, as crafted by Wernerfelt 1984 and extended by Barney 1991, provides an approach to explain business organizations' competitive advantage and performance because it emanates from critical organizational resources. RBT presupposes that resources are heterogeneous and immobile; firms possess different unique resources that competitors cannot easily imitate (Carmona, 2022). The integrated financial accounting systems in DMBs, for instance, which encompass a wide variety of components, including even general ledger management and automated reconciliation, may themselves be considered strategic resources (Hassan et al. 2024). These systems meet the criteria of being valuable, rare, inimitable, and non-substitutable (VRIN), as they improve operational efficiency, accuracy, and regulatory compliance, leading to enhanced performance indicators like return on assets and cost reductions (Owolabi et al., 2023). IFAS thus enables banks to facilitate operational efficiency and gain competitive advantage (Kosadi et al., 2021). However, the limitation for RBT is in regard to a static focus on resources because it cannot apprehend fully the dynamism of technological changes or in external market conditions which have the tendencies to make one resource become more or less valuable than others over some time Apriliyanti, 2022

### **2.3 Empirical Review**

Various studies of the integrated financial accounting system which have been conducted in some developed and developing countries, including Nigeria, are diverse. For instance, Oladejo et al. (2020) proved that real-time and nominal accounting system adoption will lead to timely and more accurate financial reports. The finding is supported by the work of Oladejo and Yinus, 2020, in discovering that bank size, cost of ICT deployment, perceived ease of use and perceived benefits are significant drivers of e-accounting adoption and have resulted in improved quality of financial reporting for Nigerian banks. Adoption of cloud-based computing has become one of the key trends in the banking industry. Yahaya et al. (2022) established positive relationships between top management support, perceived usefulness, organizational competency, service quality, and the adoption of cloud-based systems in Nigerian banks. In the same light, Okere (2022) reported a positive influence of cloud accounting on firm performance in the manufacturing sector. A recurring theme across a number of these studies is the positive association of robust financial reporting practices with organizational performance. Mangwiro (2020) highlighted the importance of IFRS disclosures in assessing going-concern issues in distressed South African firms. Jayawardane and Gamalath (2020) indicated improved SME performance in Sri Lanka through enhanced financial reporting practices. Other studies by Etim et al. (2020) and Fauzi et al. (2022) further reinforced the positive relationship between financial reporting and sustainability or performance of organizations across various sectors. Adoption of International Financial Reporting Standards is found to have a positive effect on financial transparency and performance (Kwasau, 2021). This again emphasizes the need for global standards in order to bring forth more accuracy and comparability in reporting.

In their examination of regulatory compliance modules, Yusuf and Ekundayo (2018) investigated the repercussions of regulatory sanctions on the operational performance of Deposit Money Banks (DMBs). The analysis focused on the monetary penalties levied by regulatory authorities during the period from 2006 to 2015. The findings revealed that the financial penalties did not exert a statistically significant impact on the financial outcomes of the offending institutions, suggesting that DMBs regarded regulatory fines as operational expenditures that could be passed on to consumers. The research underscored the limited

influence of regulatory sanctions within the context of Nigeria's emerging economy, where it was observed that banks continue to generate profits despite engaging in regulatory infractions. In a parallel investigation, Durodola (2022) assessed the efficacy of regulatory frameworks enforced by authorities on the performance metrics of microfinance banks in Kwara State. The outcomes of this investigation revealed that regulatory practices play a crucial role in shaping the financial performance of Microfinance Banks (MFBs), as effective adherence to these regulations is likely to foster enhanced operational stability and bolster customer confidence. On a related note, Osakwe, et al. (2022) conducted research on the influence of the Central Bank of Nigeria's regulations on DMB performance. Their study emphasized that review of monetary policies was an important factor in enhancing the regulatory framework for better performance of banks. Akeni et al. (2024) examined the impact of the regulatory compliance process on organizational performance in Nigeria's Downstream Petroleum sector and adopted the descriptive survey research design and employed regression analysis as analytical techniques. The study found that the regulatory process (legal framework, monitoring process, and price fixing process) had a significant impact on organizational performance. Blockchain technology is one of the emergent transformative forces in the financial services industry.

Almahirah and Salameh (2021) investigated the potentiality of smart blockchain contracts in Jordan's banking sector. They highlighted improvements in transaction efficiency, security, and transparency. However, they also mentioned a number of challenges: regulatory, technological readiness, and cybersecurity risks. For instance, Owolabi et al. (2023) identify that integrated reporting was positively related to investor returns in the banks, suggesting a better financial outcome from comprehensive disclosure frameworks.

Relatedly, Ali and Oudat (2021) also pointed out the role of integrated accounting information systems in enhancing the financial sustainability of banks. Digital ledger technology serves as a critical tool for financial transparency and efficiency across industries. While Chimin (2024) focused on the telecommunications sector, Chika et al. (2023) provided insights from the banking industry. Both studies underscore the importance of integrating advanced financial accounting technologies to strengthen financial and operational efficiency in Nigeria's corporate landscape. While cloud accounting systems have shown great promise for operational efficiency and cost-cutting, Chika et al. (2023) identified that their adoption by banks in Nigeria is still partial. Osakwe et al. (2022) investigated the adoption of electronic banking system and its consequence on customer deposits and the overall financial performance as a result of improved service delivery. In the same line, Ogundajo et al. (2022) observed that increased employment of advanced accounting software results in effectiveness in cost control, thus translating into better financial performance. This is a general trend where the integration of technology leads to an improvement in operations. Recent literature has focused on the importance of automated reconciliation and improved data management techniques for various industries.

Sarumi et al. (2022) proposed an improved mapping algorithm for financial account reconciliation and showed that it enhanced accuracy and efficiency in payroll management. Szega (2020) and de Menezes et al. (2020) discussed some methods of data validation and reconciliation in industrial processes, showing operational efficiency and control. Kosadi et al. (2021) analyzed user perceptions related to online payment and transaction reconciliation systems; automation of such systems reduces manual errors and enhances data accuracy. Venkatram 2021 proposed a framework for making data pipelines more resilient, particularly for industries that require reconciliation on a consistent basis. Rahardja et al. 2021 discussed how financial management systems could be integrated using web-based payment solutions and demonstrated improvements in transaction accuracy and processing times. Hassan et al. 2024 studied reconciliation defects in Infrastructure as Code frameworks and proposed an automated approach toward defect detection and mitigation that would streamline large

infrastructure setups and improve performance. As it is, the integration of GL modules with various advanced technologies has been found to contribute to increased operational performance and data management in banking systems.

Studies by Tsoulas et al. (2020), Nicolae-Bogdan-Cristian et al. (2020), and Panwar and Bhatnagar (2020) reveal that blockchain and DLT have enhanced data integrity, speed, scalability, and processing efficiency, which increasingly require high-volume transaction management. By showing that DLT is essentially complex in nature, Kannengießer et al. (2020) indicated that its implementation in GL modules increases data synchronicity across banking networks. The findings of Han et al. (2020) have further developed this to illustrate a relationship between high transaction throughput in distributed ledgers and increased scalability as required by financial institutions. Simanjuntak et al. (2022) and Nurhayati and Muda (2022) highlighted how digital ledger systems contribute to increasing the accuracy and efficiency of recording financial data, hence optimizing operational performance. Huang (2023) and Abdennadher et al. (2024) focused more on smart auditing, integrating blockchain-based ledgers in contributing to error detection, cycle time optimization, and operational efficiency in general. In fact, Rohmanto (2024) stressed that such audits should be systematic and with frameworks like COBIT 5.0 to enhance internal controls and support better financial decisions.

Mark (2022) explored the effect of accounting systems on the financial performance of SMEs in Nigeria, emphasizing how effective accounting practices contribute to business sustainability. The study found that the adoption of computerized accounting systems improves financial performance through enhanced record-keeping, efficiency, and compliance with financial regulations. Similarly, Otengo, et al. (2023) investigated the impact of integrated financial accounting systems on the financial performance of chain stores in Kenya. Their findings showed that asset management systems, payroll systems, and computerized accounting systems significantly influence financial performance. The effective implementation of these systems enhances cost control, revenue management, and financial accountability. Financial accounting systems serve as strategic tools for improving financial transparency and operational performance. While Adhi and Azizah (2024) focused on MSMEs and regulatory compliance, they highlighted that the role of accounting systems enhances organizational performance across industries. Overall, these studies suggest that general ledger modules facilitate not only the smoothing of financial processes but also accuracy, scalability, and efficiency in banking operations.

A broad-based literature review on how financial reporting practices and technological advancement influence operational performance focuses on the banking sector. Despite the fact that limited studies (Mark, 2022; Otengo et al., 2023; Adhi & Azizah, 2024) have been conducted on integrated financial reporting and operational performance, there are still gaps in understanding integrated financial reporting and operational performance at Nigerian Deposit Money Banks (DMBs). Although prior studies have looked at aspects of financial reporting, little attention has been paid to the effect that general ledger management (Chimin, 2024), and regulatory compliance modules (Akeni, 2024) of integrated financial systems have on organizational performance in Nigeria. The works of Yusuf & Ekundayo, 2018; Osakwe et al., 2022; Durodola, 2022; Oladejo et al., 2020; Jayawardane & Gamlath, 2020; Ali & Oudat, 2021; Ogundajo et al., 2022; Yahaya et al., 2022; Osakwe et al., 2022; Owolabi et al., 2023; Hassan et al., 2024, Akeni, 2024 were consulted for this study.

This research is important and timely as it addresses critical gaps in understanding the impact of integrated financial reporting on operational performance in Nigerian Deposit Money Banks (DMBs). Institutionally, most prior studies aforementioned have primarily focused on corporate organizations, SMEs, and the telecommunications sector, with limited attention to

integrated financial accounting systems and their impact on the performance of Deposit Money Banks (DMBs) in Nigeria. Given the rapid technological advancements in the banking sector, investigating these systems is crucial for improving financial transparency and operational efficiency. From the forgoing review of related literature, the following hypotheses are postulated:

H<sub>01</sub>: General ledger management within integrated financial accounting systems does not have a significant impact on the operational performance of DMBs in Nigeria.

H<sub>02</sub>: An automated reconciliation module does not significantly influence the operational performance of DMBs in Nigeria.

H<sub>03</sub>: The modules of regulatory compliance in the integrated financial accounting system do not significantly influence operational performance in DMBs in Nigeria.

H<sub>04</sub>: There is no significant correlation between the integrated financial accounting systems and the operational performance of DMBs in Nigeria.

### **3. Methodology**

A descriptive survey design has been adopted in the study to assess the impact of IFAS on operational performance among DMBs in Nigeria. The target population for the study comprises the senior staff from finance, accounting, auditing, operations, and IT departments of all Deposit Money Banks in Nigeria. The sample size used in the study was 105 respondents. Judgmental sampling was employed to select seven key senior staff (Chief Financial Officer, Head of Internal Audit, Operational General Manager, Head of Risk Management, Senior Compliance Officer, IT Director, and Financial Controller) from 15 banks with commercial licenses (CBN, 2024). This approach focuses on individuals with specific knowledge of IFAS and ten years of experience in the banking industry, ensuring relevant data. The survey questionnaires with a five-point Likert scale were utilized for assessing General Ledger Management, Automated Reconciliation Modules, and Regulatory Compliance Modules. Data are summarized by descriptive statistics, while hypothesis testing is done by Covariance-Based Structural Equation Modeling using SmartPLS 4. CB-SEM is used as an appropriate methodology in the current study to analyze complex models and test causal relationship among multiple variables. This study uses a structural model in assessing the relationship between the three independent variables: General Ledger Management, Automated Reconciliation Modules, and Regulatory Compliance Modules, and the dependent variable, Operational Performance. This model of the study is specified as:

$$OP = \beta_0 + \beta_1 GLM + \beta_2 ARM + \beta_3 RCM + \epsilon \dots \dots \dots (3.1)$$

Where: OP = Operational Performance, GLM = General Ledger Management, ARM = Automated Reconciliation Modules, RCM = Regulatory Compliance Modules,  $\epsilon$  = Error term

#### **3.1 Theoretical Justification for Resource-Based Theory**

The Resource-Based Theory (RBT) is selected to underpin this study because it provides a strong foundation for understanding how the integration of accounting systems enhances the operational performance of Deposit Money Banks (DMBs). RBT posits that organizations achieve a competitive advantage by effectively utilizing unique, valuable, rare, and inimitable resources.

In the context of this study, General Ledger Management (GLM), Automated Reconciliation Modules (ARM), and Regulatory Compliance Modules (RCM) are considered critical technological resources that enhance financial reporting accuracy, operational efficiency, and regulatory adherence. By leveraging these integrated accounting systems, DMBs can improve decision-making, reduce financial risks, and ensure compliance with regulatory requirements, ultimately driving superior operational performance (OP).

Thus, the adoption of RBT aligns with the study's objective by emphasizing the strategic role of integrated accounting systems as essential resources that contribute to the sustainable performance of DMBs.

## 4. Results and Discussions

### 4.1 Descriptive Statistics

This section presents the descriptive statistics for the study variables, including General Ledger Management (GLM), Automated Reconciliation Modules (ARM), Regulatory Compliance Modules (RCM), and Operational Performance (OP).

**Table 1. Descriptive Statistics**

Name	Items	Mean	Std. Dev.	Excess kurtosis	Skewness	Cramér-von Mises p value
<b>GLM1</b>	Acts as the Central repository for all accounting data from different departments	3.640	1.229	-1.000	-0.468	0.000
<b>GLM2</b>	Consolidates all financial transactions from various branches and Units	3.440	1.080	-0.943	-0.184	0.000
<b>GLM3</b>	Maintaining accuracy and consistency in financial records and reporting	3.280	1.001	-0.810	-0.106	0.000
<b>GLM4</b>	Handles multi-currency transactions	4.440	0.726	1.287	-1.242	0.000
<b>GLM5</b>	Accuracy of financial reports and reductions in errors in financial transactions	3.120	1.070	-0.655	-0.046	0.000
<b>GLM6</b>	Timely updates on financial transactions	3.820	0.887	-0.584	-0.338	0.000
<b>ARM1</b>	Reduction in manual efforts	3.980	1.029	0.373	-0.980	0.000
<b>ARM2</b>	Timely matching of transactions	3.400	1.200	-0.541	-0.616	0.000
<b>ARM3</b>	Improvement in financial reporting efficiency	3.600	1.114	-0.522	-0.484	0.000
<b>ARM4</b>	Effectiveness in detecting discrepancies in financial records	3.780	0.965	-0.634	-0.498	0.000
<b>ARM5</b>	Reduction in reconciliation time	3.600	1.217	-0.716	-0.550	0.000
<b>ARM6</b>	Enhancement of financial data accuracy and transparency	3.960	0.979	-0.700	-0.577	0.000
<b>RCM1</b>	Ensuring adherence to regulations	3.920	1.093	0.383	-0.975	0.000
<b>RCM2</b>	Real-time updates on regulatory changes	4.040	0.824	-0.308	-0.519	0.000
<b>RCM3</b>	Avoidance of non-compliance penalties	3.900	1.025	0.789	-0.943	0.000
<b>RCM4</b>	Streamlining of regulatory reporting	3.840	0.946	0.153	-0.544	0.000
<b>RCM5</b>	Reduction of compliance workload	3.620	1.056	-0.097	-0.642	0.000
<b>RCM6</b>	Adaptation to new regulatory requirements	4.160	0.758	-1.219	-0.284	0.000
<b>OP1</b>	Improvement in overall operational efficiency	4.000	1.020	0.330	-0.933	0.000
<b>OP2</b>	Enhancement in the accuracy of operations and financial integrity	4.000	0.849	-0.116	-0.608	0.000
<b>OP3</b>	Reduction in operational costs	3.980	0.883	-0.511	-0.499	0.000
<b>OP4</b>	Increase in productivity	3.880	0.886	-0.428	-0.467	0.000
<b>OP5</b>	Improvement in the quality of financial services provided to customers	3.940	0.988	0.475	-0.902	0.000
<b>OP6</b>	Enhancement in operational risk management	4.220	0.855	0.621	-1.044	0.000

Authors' Computation (2024) using SmartPLS-4

From the above table, it can be observed that all the items have mean values ranging from 3.12 to 4.44, indicating that respondents generally agree that GLM, ARM, and RCM have a positive impact on the operational performance of Nigerian Deposit Money Banks. For instance, the statement, GLM4: The ledger management system effectively enhances operational efficiency,

has a higher mean of 4.44. The standard deviations are mostly below 1.23, indicating moderate dispersion around the mean, which further signifies that responses are reasonably clustered with minimal extreme values.

Regarding skewness, most of the items have negative values; this indicates that most of the data points are slightly skewed to the left, which means that the respondents rated the items at the higher scale. For example, GLM4 and OP6 have -1.242 and -1.044, respectively. These indicate that the responses in both items are concentrated at the high scale. The kurtosis values range from -1.219 to 1.287, with most of the items showing kurtosis values close to zero, indicating that the data have light tails. However, items like GLM4 have positive kurtosis, reflecting a more peaked distribution. All the Cramér-von Mises p-values are 0.000, indicating that the null hypothesis of no normality is rejected for each item. Finally, according to Hair et al. (2022), a skew and kurtosis range between +1 and -1 means that the distribution is acceptable in terms of normality. Although most of the variables are within this range, some, such as GLM4 and OP6, go a little higher, indicating a normal distribution. Therefore, these are enough justifications for conducting normal statistical analysis with this sample data.

#### 4.2 Basic CB-SEM Algorithm

In covariance-based SEM, factor correlations, construct reliability, and validity assess relationships among variables, while R-square values and parameter estimates evaluate the model's explanatory power and fit. There are depicted in Table 2-4.

**Table 2. Factor Correlations**

Variables	ARM	GLM	OP	RCM
<b>ARM</b>	1.000			
<b>GLM</b>	0.423	1.000		
<b>OP</b>	0.780	0.576	1.000	
<b>RCM</b>	0.864	0.765	0.839	1.000

Authors' Computation (2024) using SmartPLS-4

**Table 3. Reliability and Validity Results**

Variable	Cronbach's alpha (standardized)	Cronbach's alpha (unstandardized)	Composite reliability (rho_c)	Average variance extracted (AVE)
<b>ARM</b>	0.840	0.839	0.838	0.584
<b>GLM</b>	0.827	0.834	0.855	0.650
<b>OP</b>	0.862	0.865	0.875	0.592
<b>RCM</b>	0.803	0.804	0.811	0.532

Authors' Computation (2024) using SmartPLS-4

**Table 4. Factor - Covariance**

	ARM	GLM	OP	RCM
<b>ARM</b>	0.606	0.339	0.558	0.550
<b>GLM</b>	0.339	1.060	0.545	0.644
<b>OP</b>	0.558	0.545	0.845	0.631
<b>RCM</b>	0.550	0.644	0.631	0.669
		<b>R-square</b>	0.717	

Authors' Computation (2024) using SmartPLS-4

As Table 2 presents, the factor correlations stand to indicate that all latent variables are highly related, most of which are ARM and RCM, 0.864, showing that these two constructs have shared a meaningful underlying dimension in this model. Also, it was found that GLM correlated positively with other factors. However, its relationship is moderate with ARM, 0.423. Table 3: All the constructs have internal consistency of above 0.80 for standardized and unstandardized measures. Cronbach's alpha values were above 0.80 for both standardized and unstandardized measures, and the composite reliability (rho\_c) for all constructs was greater

than the acceptable threshold of 0.7 while AVE values ranged between 0.532 and 0.650 supporting convergent validity. The covariance matrix shown in Table 4 has also further increased the magnitude of the inter-relatedness among these constructs with large covariance values, such as the 0.558 value between ARM and OP. This R-square of 0.717 goes to support the fact that a large part of variance in the outcome variable is being explained by this model hence strong predictive capability regarding things like operational performance.

**Table 5. Factors- Estimated Parameters**

Variables	Parameter estimates	Standard errors	T-values	Sig.
<b>ARM</b>	0.606	0.209	2.893	0.006
<b>GLM</b>	1.060	0.303	3.496	0.001
<b>OP</b>	0.239	0.100	2.394	0.020
<b>RCM</b>	0.669	0.222	3.012	0.004
<b>GLM &lt;-&gt; ARM</b>	0.339	0.147	2.298	0.026
<b>RCM &lt;-&gt; ARM</b>	0.550	0.170	3.240	0.002
<b>RCM &lt;-&gt; GLM</b>	0.644	0.193	3.338	0.002

Authors' Computation (2024) using SmartPLS-4

### 4.3 Restatement of Hypotheses and Discussion of Findings

The hypotheses in this study were targeted at ascertaining the influence of different modules within integrated financial accounting systems on operational performance in DMBs in Nigeria. The results in Table 5, which presents estimated parameters, standard errors, t-values, and p-values, provide strong evidence with regard to the significance of these relationships.

H<sub>01</sub>: The output is positive and statistically significant of GLM on operational performance. It had a parameter estimate of 1.060, the t-statistics value of 3.496, and a p-value (sig) of 0.001, which showed that at 0.001 Significance Level, the GLM has significantly improved operational performance, hence the null hypothesis will be rejected. The high value of GLM means that the decision-making is going to improve, reduction in errors will be facilitated, as well as real-time financial reporting, which is a feature of good operational performance. The rejection of the null hypothesis in this study goes hand in glove with other studies such as Nicolae-Bogdan-Cristian, et al. (2020), Han, et al. (2020), Kosadi et al. (2021), Ali and Oudat (2021), Nurhayati, et al. (2022), Simanjuntak and Sinambela (2022), Owolabi et al. (2023), Huang, (2023), Abdennadher, et al. (2024), and Hassan, et al. (2024), which demonstrated that good GLM significantly enhances the efficiency of an organization by ensuring the accuracy of financial reporting and compliance with set regulatory requirements. The implication is that DMBs that are able to invest in optimizing their GLM systems achieve improved operational performance and, hence enhance overall financial stability and regulatory compliance. Thus, the study provides empirical support for the Resource-Based Theory by demonstrating that leveraging advanced accounting systems such as integrated GLM frameworks can serve as a strategic asset for DMBs, driving efficiency and compliance in the banking sector.

H<sub>02</sub>: ARM also has a significant effect on operational performance, as depicted by the parameter estimate of 0.606, a t-value of 2.893, and a p-value of 0.006. Thus, the null hypothesis is not accepted, and this ascertains that ARM is important in enhancing operational performance. The rejection of the null hypothesis emphasizes that ARM, through automating the reconciliation of internal records against external data, plays a vital role in reducing errors, fraud, and time delays in financial reconciliations. In support of this, similar findings on enhancing operational efficiency by reducing manual transaction processing and reconciling financial records accurately come from previous studies conducted by Oladejo et al. (2020), Jayawardene and Gamlath (2020), Sarumi, et al. (2020), and Ogundayo, et al. (2022), Otengo, et al. (2023), Adhi and Azzah (2024). The implication is clear for DMBs: ARM technology adoption improves operational performance in terms of reduced manual interventions, enhanced reliability of financial data, and timely regulatory compliance at lower costs with

improved risk management. However, the relationship between ARM and operational performance is well-grounded in Resource-Based Theory (RBT), which argues that financial institutions can gain and sustain competitive advantage by effectively managing valuable, rare, inimitable, and non-substitutable (VRIN) resources. Thus, Resource-Based Theory supports the argument that DMBs leveraging ARM as a core operational asset can achieve superior performance, enhance financial accuracy, and sustain regulatory compliance. Investing in cutting-edge reconciliation technology is not only an operational necessity but also a strategic move toward long-term financial sustainability and industry competitiveness.

H<sub>03</sub>: Similarly, RCMs are significant drivers of operational performance; the parameter estimate is 0.669, with a t-value of 3.012 and a p-value of 0.004. It implies the negation of the null hypothesis since RCM has a vital positive effect on the efficiency operation of banks. This leads to the resultant finding with regards to refusal of the null hypothesis while establishing that, in fact, RCM is very crucial in making the banks operate within dynamic frameworks of AML and KYC. Though the study by Yusuf and Ekundayo, 2018, did not show any significant influence which regulatory compliance had on performance, this study supports what Osakwe et al. (2022), Durodola (2022), Mark (2022), and Akeni (2024) found that compliance modules raise the level of operational performance because of avoiding legal sanctions, protection of reputation, and enhancement of risk management processes. To the Nigerian DMBs, this implies that the modules of regulatory compliance are not only about ensuring regulatory compliance but are also strategic in fostering sustainability performance by entrenching a culture of accountability and transparency. Resource-based theory support the relationship between regulatory compliance Modules (RCM) and Operational Performance of DMBs. The relationship between RCM and operational performance is well-grounded in Resource-Based Theory (RBT), which asserts that an organization's sustainable competitive advantage stems from its ability to acquire and leverage valuable, rare, inimitable, and non-substitutable (VRIN) resources. Thus, DMBs that invest in advanced RCMs gain a sustainable competitive advantage by ensuring regulatory adherence, reducing operational risks, and enhancing financial integrity. This study reinforces RBT's assertion that leveraging unique and well-integrated compliance mechanisms can significantly boost banking efficiency and long-term viability.

H<sub>04</sub>: Hypothesis H<sub>04</sub>: There is no significant correlation between the key modules of integrated financial accounting systems in Deposit Money Banks. The correlations, as shown in Table 5, refute this hypothesis. Significant relationships between the modules have been recorded. For example, the correlation between General Ledger Management and Automated Reconciliation Modules is positive and significant, with a parameter estimate of 0.339 and a p-value of 0.026. This, therefore, indicates that these two systems are closely linked and work together to enhance operational efficiency. The relationship is even stronger with the Regulatory Compliance Modules (RCM) and ARM, at a parameter estimate of 0.550 and a p-value of 0.002, underlining the complementarity of both constructs. Finally, the strong correlation between RCM and GLM, with a parameter estimate of 0.644 and a p-value of 0.002, further underlines the interdependence of these systems in such a way that their integration and coordination will be necessary to drive the wheels of operational efficiency in banks. These findings aligned with findings of Mark (2022), Otengo et al. (2023), Akeni (2024), and Adhi and Azizah (2024) that integrated financial accounting systems have significant prelateships with organizational operation performance. These findings are supported by the resource-based theory, which argues that firms achieve competitive advantage by using and integrating their resources effectively. In particular, with DMBs, this illustrates the integration that is urgently needed in such modules for enhanced operational efficiency, financial reporting, and regulatory compliance.

The Resource-Based Theory (RBT) hinges the relationship between integrated financial accounting systems and operational performance by asserting that firms gain a competitive advantage by effectively utilizing and integrating their internal resources. Thus, DMBs that strategically integrate their financial accounting systems will gain a competitive advantage by improving operational efficiency, reducing regulatory risks, and enhancing decision-making processes. This study reinforces RBT's assertion that resource integration is a key driver of sustainable competitive advantage in the banking industry.

#### **4.4 Social and Practical Implications**

This study highlights the crucial role of integrated financial accounting systems in enhancing the operational performance of Deposit Money Banks (DMBs) in Nigeria. The findings emphasize that investing in General Ledger Management (GLM), Automated Reconciliation Modules (ARM), and Regulatory Compliance Modules (RCM) leads to improved financial transparency, reduced errors, and strengthened regulatory adherence. Socially, this fosters greater trust in the banking sector by ensuring accountability and minimizing financial irregularities or frauds. Practically, the study provides actionable insights for banks to optimize financial reporting processes, improve risk management, and enhance decision-making efficiency. Additionally, regulatory bodies can leverage these findings to promote technology-driven financial oversight, ensuring compliance with anti-money laundering (AML) and Know Your Customer (KYC) requirements. Ultimately, adopting integrated financial accounting systems contributes to banking sector stability, sustainability, and economic growth.

#### **5. Conclusion and Recommendation**

The study, thus, concludes that the three core modules of integrated financial accounting systems-general ledger management, automated reconciliation, and regulatory compliance-are separately contributing positively to a significant impact in operational performance among Deposit Money Banks of Nigeria (DMBs). This means that enhancements to such systems could therefore translate into better efficiency and overall performance in the sector. The significant relationships occurring among the modules further reflect that their collective effect acts very importantly in driving operational success.

It is hereby recommended that DMBs invest more in the optimization of general ledger management, automated reconciliation, and regulatory compliance modules. Better integration and functionality of such systems may translate to improved operating performance, reduced financial risks, and effective regulatory compliance. In this regard, banks should also engage in training and development programs as a way of enabling their employees to maximize utility from those systems.

DMBs should adopt a robust integrated financial accounting system to enhance data security, financial transparency, and regulatory compliance. Additionally, regulatory bodies should enforce stricter guidelines to mitigate financial fraud risks associated with weak accounting practices.

Future studies can also attempt to explore the moderation effects of other factors, such as organizational culture or approaches to management, on the relationship between integrated financial accounting systems and operational performance.

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