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Procurement Audit Practices and Financial Performance of Federal Government Projects in Nigeria: A PLS-SEM Analysis

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Abstract: Public infrastructure delivery in Nigeria remains plagued by contractor cartels, chronic cost overruns, and systemic budget variances. This study examined the effect of five distinct audit practices including Internal Control, Compliance, Tendering Process, ICT-Based, and Value-for-Money on the financial performance of federal government projects. Employing a cross-sectional quantitative survey design, primary data were collected via structured questionnaires from 135 procurement officers, internal auditors, and finance officers across eight purposively selected federal MDAs, using stratified sampling with equal allocation. Data analysis via Partial Least Squares Structural Equation Modeling (PLS-SEM) revealed that the measurement model demonstrated robust psychometric properties, while the structural model explained 79.1% ($R^2 = 0.791$) of the variance in financial performance. Tendering Process Audit Practices emerged as the most significant positive driver ($\beta = 0.528$, $p < 0.001$), followed by Value-for-Money ($\beta = 0.500$, $p < 0.001$) and Internal Control audit practices ($\beta = 0.493$, $p < 0.001$). However, Compliance ($\beta = -0.263$, $p < 0.05$) and ICT-Based audit practices ($\beta = -0.323$, $p < 0.05$) exhibited significant negative effects, suggesting that procedural rigidities and implementation gaps currently hinder fiscal outcomes. Grounded in Agency Theory, this study concluded that a synchronized audit framework is essential for fostering organizational resilience. This study therefore recommended that prioritizing independent tendering audits, transitioning toward performance-based (3Es) evaluation, and investing in technical capacity building to transform digital oversight into a strategic asset for national infrastructure stability.

Keywords: *Procurement Audit, Public Projects, Nigeria, Value-for-Money, Financial Performance.*

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I. INTRODUCTION

Public infrastructure development remains a transformative driver of national progress, serving as the physical and economic backbone upon which modern societies are built. When executed effectively, the integrity of procurement systems acts as the linchpin of national economic stability and fiscal sustainability, ensuring that public funds are translated into tangible societal benefits (Ademeso & Bulus, 2025; Agyekum et al., 2025). In this regard, the financial performance of government projects stands as a cornerstone of public sector accountability and sustainable development worldwide, effectively bridging the gap between institutional governance and long-term societal value (Gomes et al., 2023). Ultimately, this performance reflects the capacity of states to deliver high-quality infrastructure, essential services, and robust economic growth through the disciplined and transparent application of financial resources (Adeoye et al., 2024; Musyoka, 2022; Yilmaz, 2025).

Bergman (2023) found that Swedish municipal audits yielded no significant compliance improvements. Instead, rigid oversight often distorted incentives toward sub-optimal, lowest-price tendering. The study concludes that audit frameworks must balance rigorous compliance with procurement discretion to avoid efficiency-stifling outcomes. Similarly, in the United States, Samuels (2021) revealed that government procurement auditing serves as a rigorous diagnostic tool that enhances firm transparency and mitigates information asymmetry, proving far more intensive than traditional external financial audits. In middle-income contexts such as Ukraine, the adoption of automated oversight systems has transformed the audit landscape; Drozd et al. (2021) demonstrated that evaluating quantitative risk parameters within e-procurement platforms is essential for determining the effective use of public funds and identifying systemic budget savings.

In Tanzania, Ali (2023) argued that procurement audits are the primary drivers for achieving value for money, as they

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ensure that legal and regulatory frameworks are strictly followed to enable the selection of cost-effective project bids. This is corroborated by Mrindoko and Danieli (2025), who found that in Tanzanian government agencies, robust internal control environments and continuous monitoring are significant predictors of procurement efficiency and financial compliance. In Kenya, Gichuki and Paul (2020) emphasized that public procurement audits add substantial value by preventing improper practices and improving past performance across state corporations. Furthermore, Evans and Alexander (2021) established a significant positive correlation between compliance audits and supply chain performance in the Kenyan transport sector, suggesting that performance is hindered whenever compliant planning cycles are absent. Ajaelu et al. (2021) observed that the Nigerian tendering process remains vulnerable to contractor cartels and biased pre-qualification assessments, which directly degrades the delivery of institutional infrastructure. Abdulsalam and Bamidele (2024) posited that internal control remains a key driver of financial performance in Nigerian entities, where effective risk assessment and monitoring are necessary to reduce fraud and misappropriation. Despite the existence of the Public Procurement Act, Elike (2025) noted that inconsistent implementation, political interference, and weak enforcement often undermine financial accountability in Nigerian public boards. Consequently, the alignment of procurement audit practices with financial performance is not merely a regulatory requirement but a strategic necessity for the successful execution of government projects in Nigeria. This study investigates how audit practices encompassing internal control, compliance, tendering, ICT-based, and value-for-money dimensions affect financial outcomes such as cost efficiency, budget variance, and the mitigation of cost overruns to ensure fiscal accountability in national infrastructure delivery.

Internal control audit practices constitute strategic mechanisms including approval workflows, segregation of duties, and rigorous authorization procedures that enforce accountability, eliminate resource waste, and minimize fraudulent activities (Saltarelli, 2025; Mrindoko & Danieli, 2025; Ridwan, 2024; Cornelis et al., 2024). The significance of internal controls lies in their ability to serve as the foundation for institutional discipline, with a robust control environment being essential for identifying and curbing fraud in procurement assignments. Compliance audit practices refer to independent assessments of organizational adherence to legal and regulatory frameworks, encompassing the conformative review of planning, bidding, and contract management processes against established criteria to reduce operational risks and safeguard against financial mismanagement (Okoth, 2019; Kinyua et al., 2024; Root, 2019; Williams & Tillipman, 2024). By ensuring that every procurement activity aligns with statutory requirements, compliance audits act as a safeguard against systemic policy gaps.

Similarly, tendering process audit practices involve rigorous scrutiny of the methods employed to invite, evaluate, and award contracts, ensuring that priced offers are evaluated fairly to prevent contract sum inflation and enable the selection of the most cost-effective options (Matto & Magali, 2025; Ajaelu et al., 2021; Ali, 2023; Njagi & Ismail, 2017). The significance of this variable lies in its role in fostering competition and impartiality, thereby refining the way the state engages with the private sector. Furthermore, ICT-based audit practices represent the integration of digital tools and automated systems into the oversight framework, utilizing customized audit software to enhance precision, enable real-time monitoring, simplify audit trails, and reduce discrepancies such as duplicate payments (Thottoli & Thomas, 2022; Sumida, 2025; Musa & Abraham, 2025; Mutaki & Kiwango, 2025). In modern governance, these digital systems are essential for maintaining transparency and accessibility in procurement records.

Value-for-money audit practices focus on the economy, efficiency, and effectiveness of public spending through professional examination of systems to ensure resources are managed with due regard to the "3Es," shifting focus from the lowest initial price to optimal whole-life costs and benchmarking tasks against pre-arranged standards to trigger continuous improvement (Kalubanga & Kakwezi, 2013; Nsiah-Asare & Prempeh, 2016; Adedokun et al., 2020; Sallwa, 2022). The dependent variable, financial performance, is operationalized through cost efficiency, budget variance, and cost overruns, representing the degree to which an organization correctly applies financial principles to achieve its objectives. The significance of financial performance lies in its role as the ultimate benchmark for the success of government activities; when project expenditures consistently align with approved budgets, it indicates the presence of public accountability and efficient resource allocation (Litamahuputty, 2021; Adewale & Akinlo, 2019; Danieli & Mrindoko, 2025).

Each year, billions of naira are appropriated for Nigerian public infrastructure projects, yet a significant proportion fails to translate into tangible societal benefits. The persistent gap between budgeted and actual expenditure characterized by chronic cost overruns, contractor cartels, and abandoned projects underscored a fundamental failure in procurement governance (Ajaelu et al., 2021; Elike, 2025). Optimal financial performance, reflected in rigorous cost efficiency and minimal budget variance, serves as the definitive benchmark for institutional success and public accountability (Litamahuputty, 2021; Danieli & Mrindoko, 2025). However, Nigerian government projects remain plagued by biased pre-qualifications and inconsistent enforcement of procurement regulations, perpetuating systemic inefficiencies. Significant gaps persist in the existing literature. Bergman (2023) examined Swedish municipal audits and found no significant compliance improvement, while Ali (2023) and others investigated audit variables in isolation, failing to capture their synergistic effects. In Nigeria, prior studies such as Abdulsalam and Bamidele (2024) focused narrowly on small and medium enterprises, leaving a critical void in understanding how audit practices influence large-scale infrastructure projects within federal Ministries, Departments, and Agencies.

This study addresses these deficiencies by providing investigation into how internal control, compliance, tendering process, ICT-based, and value-for-money audit practices

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collectively synchronize to mitigate cost overruns and enhance financial outcomes (Asiedu & Adaku, 2020). Notably, this research represents a pioneering effort, as it is the first to consolidate these five distinct audit dimensions into a single comprehensive framework within the Nigerian context. By utilizing SmartPLS 3 for rigorous path analysis, the study is uniquely designed to address the systemic budget variances that have historically plagued Nigeria's public infrastructure delivery, with the following specific objectives to:

- Examine the effect of internal control audit practices on the financial performance of government projects in Nigeria.
- Assess the effect of compliance audit practices on the financial performance of government projects in Nigeria.
- Determine the effect of tendering process audit practices on the financial performance of government projects in Nigeria.
- Evaluate the effect of ICT-based audit practices in enhancing the financial performance of government projects in Nigeria.
- Analyze the effect of value-for-money audit practices to the financial performance of government projects in Nigeria.

➢ *To Achieve These Objectives, This Study Empirically Tests the Following Null Hypotheses:*

- H_{01}: Internal control audit practices do not significantly affect the financial performance of government projects in Nigeria.
- H_{02}: Compliance audit practices have no significant effect on the financial performance of government projects in Nigeria.
- H_{03}: Tendering process audit practices do not significantly affect the financial performance of government projects in Nigeria.
- H_{04}: ICT-based audit practices do not significantly affect financial performance of government projects in Nigeria.
- H_{05}: Value-for-money audit practices have no significant effect on the financial performance of government projects in Nigeria.

II. LITERATURE REVIEW

A. Conceptual Explanations

➢ *Financial Performance*

Financial performance in the public sector represents an analysis of an organization's ability to apply financial principles to achieve its strategic objectives while ensuring accountability to stakeholders. Litamahuputty (2021) defined financial performance as an analysis carried out to see the extent to which an organization has correctly perceived and applied financial principles to produce reliable and understandable statements. Abdulsalam and Bamidele (2024) described financial performance as a measure of operational profitability and the effective management of limited resources to eliminate inefficiencies. Furthermore, Appiah et al. (2023) identified it as the ability of public organizations to effectively and efficiently procure goods and services without violating value-for-money requirements. From a budgetary perspective, Danieli and Mrindoko (2025) defined budget performance as the center of a government's ability to achieve efficiency, typically measured through the analysis of planned versus actual financial outcomes. Additionally, Fadic (2020) explained that financial performance in government procurement is evidenced by reported increases in revenues and fixed assets which contribute to organizational dynamics.

Ali (2023) argued that performance is primarily assessed through value for money, ensuring every unit of currency spent results in tangible benefits. Conversely, Islam (2025) noted that poor financial performance manifested as unpenalized time overruns and inflated project costs. In this study, the dependent variable, financial performance, is measured through cost efficiency, budget variance, and cost overruns. According to Okoth (2019), cost efficiency is measured by the variance between planned and actual costs, reflecting the audit's ability to identify cost-saving opportunities and reduce execution expenses. Junita et al. (2018) identified budget variance as the difference between initial budget amounts and actual expenditures, which clarifies why actual project expenditure must consistently align with approved estimates. Asiedu and Adaku (2020) defined cost overrun as the systemic failure represented by the difference between the actual project cost and its initial budget. This highlights the role of procurement audit practices in preventing scope changes and ensuring projects are completed within the originally approved contract sum. Twesigye et al. (2022) highlighted that contract cost performance and the completeness of records are essential metrics for evaluating the effectiveness of internal control outcomes.

➢ *Procurement Audit Practices*

Procurement audit practices represent a systemic and objective evaluation of the acquisition process to ensure that organizational activities align with established legal, regulatory, and financial frameworks. Adedokun et al. (2020) defined procurement audit as an objective investigation, inspection, and scrutiny of a government procuring entity, primarily utilized to reduce inventory losses and ensure timely stock evaluation. This perspective was echoed by Saltarelli (2025), who described the audit as a thorough evaluation of the end-to-end lifecycle, encompassing sourcing, vendor approval, and invoice accuracy to serve as a diagnostic tool for visibility. Furthermore, Sumida (2025) identified procurement audit as a structured review of how a business manages purchasing to ensure efficiency and compliance while preventing unauthorized financial diversions. In the context of the public sector, Samuels (2021) clarified that government procurement auditing is a comprehensive monitoring process involving the scrutiny of business systems, management policies, and contractual provisions, often proving more rigorous than traditional financial audits.

Ali (2023) argued that these audits ensured strict adherence to regulatory frameworks, which simplified the tracking of bids and the selection of cost-effective options. This was supported by Gichuki and Paul (2020), who emphasized that such audits were vital for the realization of value addition by preventing improper practices and improving past performance. Beyond mere oversight, Pasula et al. (2018) noted that audit practices supported process optimization and cost reduction by evaluating management approaches in uncertain environments. Conversely, Etse and

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Asenso-Boakye (2014) cautioned that poor auditing processes risked maintaining corrupt practices if they failed to report underlying weaknesses. Drozd et al. (2021) explained that the methodology for calculating efficiency and economy must account for both quantitative and qualitative risks in automated systems to determine the effective use of public funds. In this study, procurement audit practices are proxied by internal control audit practices, compliance audit practices, tendering process audit practices, ICT-based audit practices, and value-for-money audit practices.

- *Internal Control Audit Practices*

Internal control audit practices constitute the structural and evaluative framework designed to safeguard organizational assets and ensure the integrity of procurement processes. This concept was extensively explored by scholars who provided diverse yet complementary definitions. Saltarelli (2025) defined internal controls in procurement as strategic mechanisms and protocols, such as approval workflows and pre-approval parameters, utilized to enforce accountability and drive continuous improvement. From a governance perspective, Abdulsalam and Bamidele (2024) described internal control as a process effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance. Furthermore, Cornelis et al. (2024) identified internal control as a policy and procedure intended to protect all assets from abuse while ensuring the availability of accurate accounting information. Additionally, Murage and Theuri (2023) defined these controls as systems involving organizing, planning, and controlling procedures that simultaneously measure and monitor performance to fulfill auditors' responsibilities.

The literature emphasized that a robust control environment serves as the foundation for institutional discipline. Mrindoko and Danieli (2025) noted that this environment was the heart of effective control, providing the structure necessary to identify and curb procurement fraud. Ridwan (2024) highlighted that robustness was achieved through the segregation of duties and rigorous authorization procedures, which prevented the concentration of power in a single individual. Similarly, Twesigye et al. (2022) argued that documentation and adherence to procurement rules significantly improved effectiveness, noting that positive changes in control activities could lead to a 38.4 percent increase in procurement success. David (2022) clarified that the internal audit function functioned to monitor management activities and attest to performance for the benefit of stakeholders. Moreover, Litamahuputty (2020) stated that the effectiveness of these supervisory functions directly affected financial performance by ensuring reliable reporting. Agboola and Tella (2021) explained that strong frameworks reduced financial mismanagement and enhanced organizational performance within the Nigerian context.

- *Compliance Audit Practices*

Compliance audit practices function as an independent, systematic review mechanism designed to authenticate the degree of an entity's adherence to statutory mandates, public procurement protocols, and specific contractual terms (Okoth, 2019; Evans & Alexander, 2021). Alfraih (2016) identified the practice as a systematic review ensuring every activity within an entity aligns with established procurement systems. Ong'era and Nyaberi (2025) further explained that compliance auditing is a critical mechanism for enhancing procurement governance by assessing adherence to laws and internal controls to maintain transparency and financial accountability.

Kinyua et al. (2024) highlighted that compliance auditing practices reduced operational risk by ensuring firms met stringent performance conditions, which enhanced the credibility of financial reporting. Additionally, Williams and Tillipman (2024) noted that these audits promoted transparency through real-time monitoring and risk-based assessments. Within the African context, Agwate (2023) found that compliance with rules had the strongest correlation with financial performance, while Elike (2025) highlighted that weak enforcement of procurement laws often undermined value for money outcomes. Ridwan (2024) clarified that this systematic process allowed companies to identify discrepancies and optimize organizational outcomes through a careful review of purchasing records. Evans and Alexander (2021) concluded that supply chain performance was significantly hindered without a proper compliant planning cycle and effective internal control mechanisms.

- *Tendering Process Audit Practices*

Tendering process audit practices constitute an examination of administrative and competitive protocols employed to solicit and evaluate supplier proposals. This function is conceptualized by Matto and Magali (2025) as an intensive information search and assessment procedure designed to qualify contractors through rigorous screening methods. Building on this, Ajaelu et al. (2021) characterized tendering as a pivotal administrative mechanism that fosters impartiality and fairness, ensuring that competition among suppliers yields suitable contractors at fiscally responsible prices. Taminiau and Heusinkveld (2017) defined it as a multi-phased engagement comprising orientation, intake, and presentation that allows auditors to navigate and meet shifting institutional expectations. To ensure the procedural integrity of these phases, Okoth (2019) emphasized that bidding audits must specifically scrutinize bid opening, closing, and evaluation methodologies.

Njagi and Ismail (2017) noted that tendering process auditing ensured that specifications were integral to the invitation and that submission deadlines were strictly managed to prevent individual interference. Etse and Asenso-Boakye (2014) argued that this practice involved a rigorous documentary review of invitation letters and evaluation reports, warning that a failure to verify these documents increased the risk of keeping corrupt practices in place. Additionally, Ali (2023) highlighted that such audits helped organizations keep track of all bids, making it easier to choose the most cost-effective options. From a risk management perspective, Drozd et al. (2021) explained that auditors must evaluate specific risk indicators, such as the risk of appeal and disqualification, to assess procurement efficiency accurately. Gichuki and Paul (2020) concluded that auditing the evaluation of received tenders had a positive relationship with overall performance. Kharikala and Ndeto (2023) clarified that auditing ensured drafting and advertising were performed

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effectively to prevent bias during the project submission phase.

- *ICT-Based Audit Practices*

ICT-based audit practices refer to the strategic integration of digital technologies and automated systems into the auditing framework to enhance the precision and transparency of financial oversight. Thottoli and Thomas (2022) defined ICT-based audit practices as the implementation of customized audit software that enables firms to leverage technological characteristics such as competency and training to improve audit quality. Furthermore, Ahmad et al. (2023) described digital auditing as an activity of utilizing digital technology and advanced techniques, such as data mining and software robots, to deliver audit work. Musa and Abraham (2025) identified ICT in the public financial domain as a constellation of systems ranging from Financial Management Information Systems to electronic auditing tools used to automate workflows and generate reports. Additionally, Sumida (2025) explained procurement automation as the use of centralized platforms to track purchase orders and payments in real time, ensuring auditors can quickly access transaction histories.

Mutaki (2022) argued that the application of ICT in monitoring procurement records had a high effect on enhancing performance by ensuring data was consistent and reliable. Similarly, Ndunguru (2022) noted that electronic procurement utilized integrated internet-based systems to monitor every stage of the procurement cycle, thereby reducing corruptive behaviors through the elimination of manual cash handling. Kong and Nelson (2020) emphasized that effective IT governance required mechanisms such as organizational structures and committees to ensure technology assets remained consistent with the firm's mission. Within the Nigerian context, Musa and Abraham (2025) highlighted that computerized systems fortified the control environment by enhancing audit trails and reducing sophisticated fraudulent schemes. Ultimately, Sayed (2025) clarified that utilizing cloud platforms and automated tracking allowed teams to maintain robust audit trails that proved compliance with strict government regulations.

- *Value-for-Money Audit Practices*

Value-for-money audit practices represent an evaluative framework designed to ensure that public resources are utilized in a manner that maximizes socioeconomic returns while maintaining the highest standards of quality. Kalubanga and Kakwezi (2013) defined value-for-money audit as an objective, professional, and systematic examination of management systems established to ensure that financial, human, and physical resources are managed with due regard to economy, efficiency, and effectiveness. Sallwa (2022) described it as an essential tool for organizational performance that assesses the procurement function to verify that public funds bring the intended return on investment. Igwe et al. (2025) identified the concept as an evaluation framework ensuring infrastructure projects achieve optimal utility and cost-effectiveness free from political interference. Furthermore, Lakew (2025) explained it as an independent examination of government programs that goes beyond traditional compliance to drive continuous improvement, while Opiyo (2015) defined it as an investigation providing a constructive assessment of whether audited bodies obtained the best possible results.

Martin (2023) argued that attaining an optimal equilibrium between total cost and quality over a project's duration was essential for meeting end-user needs. Ali (2023) highlighted that such practices are driven by auditor competence, which prevents wastage and ensures contracts represent the best economic value. In the Nigerian context, Chezue (2013) noted that value-for-money audits served as the most modern instrument for assessing whether public projects fulfilled their goals and impacted society positively. Additionally, Okolo et al. (2019) explained that these audit teams functioned to detect and prevent fraud by reviewing building operations to determine if principles of economy were implemented. Nsiah-Asare and Prempeh (2016) clarified that achieving value was not synonymous with selecting the lowest bidder but involved assessing the total cost of ownership. Adedokun et al. (2020) highlighted that these practices act as a trigger for improvement by measuring tasks against pre-arranged standards and benchmarking best practices.

➢ *Conceptual Framework of the Study*

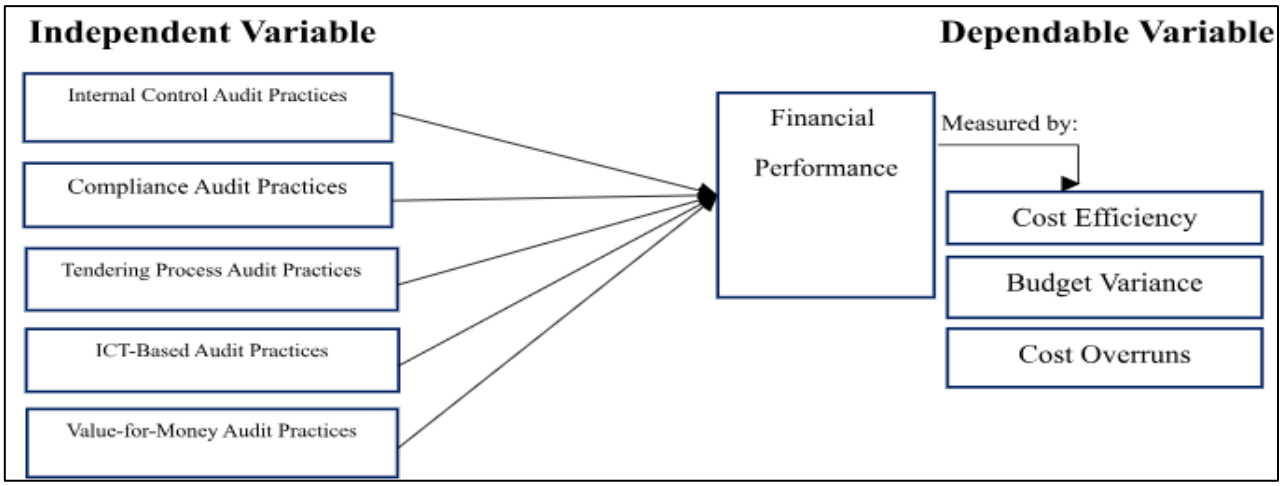

Fig 1 Conceptual Framework
Source: Researchers Conceptual Framework, 2026.

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B. Empirical Review

➢ *Internal Control Audit Practices and Financial Performance*

Abdulsalam and Bamidele (2024) investigated the effect of internal control on the financial performance of small and medium scale enterprises in Ekiti State, Nigeria. The study sought to evaluate how specific control components, risk assessment, information and communication, and monitoring influence the return on assets of small businesses. A quantitative research design was adopted, utilizing a questionnaire survey to collect primary data from 75 selected small and medium scale enterprises in Ado Ekiti Metropolis, Nigeria. The researchers targeted business owners and managers to assess operational stable structural methods. Data were analyzed using correlation and regression techniques to establish the relationship between the variables. Findings revealed a positive and significant correlation between all three internal control components and financial performance at a 5% significance level. The study concluded that effective internal control is a key driver of SME profitability and recommended that owners upgrade their control systems to reduce risks like fraud and misappropriation. A strength of this study was its focus on the COSO framework within the local SME context. However, a critique is that the small sample size of 75 firms in a single metropolis may limit the generalizability of the findings to the broader Nigerian SME sector.

Twesigye et al. (2022) assessed the effect of internal control systems on procurement effectiveness in the Uganda Human Rights Commission. The study objectives were to examine the effect of the internal control environment, internal control activities, and procurement rules and regulations on procurement outcomes. The proxies aligned with internal control audit practices and compliance audit practices. Using a descriptive survey design, both qualitative and quantitative approaches were employed. Data were collected from 88 respondents drawn from a population of 140 staff, including management, human rights officers, and support staff. Questionnaires and interviews provided the data, which were analyzed using SPSS for descriptive and inferential statistics, alongside thematic content analysis. Findings revealed that internal control activities accounted for 38.4% of procurement effectiveness, the control environment contributed 37.7%, while procurement rules and regulations explained 26%. Recommendations included continuous review of organizational culture, timely addressing of audit findings, and training staff on procurement rules. The strength of the study was its integration of COSO and agency theory, though its limitation was reliance on one institution.

➢ *Compliance Audit Practices and Financial Performance*

Ong'era and Nyaberi (2025) examined compliance auditing practices and procurement governance outcomes in County Government of Mombasa, Kenya. The study evaluated the influence of audit type, audit criteria, audit independence, and audit process on governance effectiveness. A descriptive and explanatory research design was adopted, targeting procurement officers, auditors, and county officials. Using stratified random sampling, a sample size of 75 was determined via Yamane's formula. Primary data were collected through structured questionnaires, while secondary data were sourced from county financial statements and audit reports. Data analysis involved descriptive and inferential statistics, including correlation and multiple regression analysis. The results showed that all four audit dimensions significantly and positively predicted procurement governance outcomes, with audit independence emerging as the most influential factor. The study recommended strengthening the institutional autonomy of audit units and enhancing resource allocation for training. A strength of the study was its multi-theoretical anchoring, while a critique is the relatively small sample size, which may limit the generalizability of the results to larger governmental contexts.

Evans and Alexander (2021) determined the effect of compliance audit of the procurement system on performance of supply chain management in state corporations in the ministry of transport. The study specifically investigated how adherence to policies, audit records, and internal systems influenced organizational outcomes. Adopting a descriptive design, the researchers targeted a population of 52 staff in the procurement, quality assurance, finance, and audit departments across State Corporations in the Ministry of Transport, Kenya. Data were collected via structured Likert-scale questionnaires and analyzed through descriptive and inferential statistics. Findings revealed a positive and significant relationship between compliance audit and supply chain performance (beta = 0.345, p = 0.003). The study established that effective control mechanisms and compliant planning cycles are vital for safeguarding performance. It was recommended that supply chain teams strictly adhere to internal systems to minimize costs and improve lead times. A strength of the work was its focus on a critical government sector using a census approach. However, the study was critique for its small sample size of 52 respondents, which might restrict the generalizability of the results to larger government ministries.

➢ *Tendering Process Audit Practices and Financial Performance*

Matto and Magali (2025) examined the effect of tender evaluation process on performance of public construction projects. The study sought to determine how commercial, technical, and financial examinations influence project outcomes. A survey strategy was adopted at the Institute of Accountancy Arusha, Tanzania, targeting 428 members of user departments, with a final sample of 205 respondents. Data analysis was performed using partial least squares structural equation modelling with the help of Smart PLS 4 software. The findings disclosed that the technical examination and financial examination of tenders were significantly associated with the performance of public construction projects, whereas the commercial examination stage served primarily as a preliminary filter. The results demonstrated that shortcomings in these evaluation stages could trigger adverse selection and moral hazard, ultimately leading to project failure. It was suggested that organizations must prioritize tender evaluation attributes alongside contract execution factors to ensure successful delivery. A strength of the research was its application of agency theory to the contract formation stage.

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Gichuki and Paul (2020) assessed the effect of public procurement audit on performance of state corporations in Kenya. The study examined preparation and planning auditing, information and publicity auditing, evaluation of tenders received auditing, and award and execution of contract auditing as proxies for procurement audit. A descriptive research design was employed, targeting 187 heads of procurement within various state corporations in Kenya. A census approach was utilized due to the small population size, resulting in 150 responsive participants who completed self-administered questionnaires. Data analysis involved descriptive and inferential statistics, including multiple regression and correlation analysis conducted via SPSS version 24. The findings revealed that all four audit components exerted a significant positive influence on organizational performance, with preparation and planning auditing contributing the highest impact. The study recommended that public institutions embrace comprehensive procurement audits to enhance performance outcomes. A strength of the study was the use of a census to eliminate sampling error, while a critique is the reliance on self-reported data from procurement heads, which may introduce social desirability bias regarding organizational efficiency.

- *ICT-Based Audit Practices and Financial Performance*

Musa and Abraham (2025) examined the impact of information and communication technology (ICT) adoption on accounting practices and financial reporting accuracy in public institutions. The study assessed the extent of technology integration and its effect on report timeliness and accuracy. A descriptive survey design was employed to collect data from accountants, auditors, and financial officers across Selected Public Institutions in Nigeria. Analysis was performed using descriptive statistics and inferential tests based on data from structured questionnaires. The findings revealed that technology adoption was moderate, with accounting information systems and electronic auditing tools being the most prominent. It was established that adoption significantly enhanced reporting accuracy, fortified internal control mechanisms, and mitigated financial fraud and human error. The study recommended strengthening infrastructure and providing regular technical training to ensure sustainable financial management. A strength of the work was its focus on modernizing public sector accountability through digital assets. However, a critique is that it primarily addressed perception-based data without incorporating longitudinal financial records to verify accuracy improvements over time.

Małys (2022) investigated ICT utilization in supply chain environmental collaboration practices as the moderator of firms' financial performance. The study analyzed the intensity of technology use within various environmental collaboration categories and its subsequent effect on financial outcomes. Adopting a quantitative research approach with a Computer-Assisted Telephone Interview technique, the study focused on a population of 500 firms located in Poland. The variables comprised the intensity of information technology utilization across green design, sustainable production, transportation, and waste management as independent factors, while financial performance served as the dependent variable. Data were analyzed using the Mann–Whitney U test to compare firms achieving financial benefits against those that did not. Findings revealed that increasing the intensity of technology utilization in most categories did not significantly affect financial performance, though a significant negative relationship was observed in green design practices regarding revenue growth. It was recommended that firms align specific technology solutions with the unique character of different collaboration categories. A strength of the study was the large, diverse sample size; however, it was critiqued for excluding the combined effect of multiple moderators on financial gains.

- *Value-for-Money Audit Practices and Financial Performance*

Lakew (2025) investigated value for money audit in Ethiopia: a study in selected federal public organizations, Ethiopia. The study examined the practice, common findings, and effectiveness of value for money audits in government institutions. The independent variables comprised economy, efficiency, and effectiveness, while the dependent variable was organizational performance. Adopting a sequential mixed-methods descriptive research design, the study analyzed a population of 310 audit reports spanning fourteen years from the Office of the Federal Auditors General alongside key informant interviews with eight purposively selected performance auditors. Data collected through document review and interviews were evaluated using thematic and descriptive quantitative analyses. The findings revealed widespread irregularities such as poor monitoring, absent information systems, and weak procurement planning, noting that eighty-five percent of audits lacked follow-ups and only a third of recommendations were implemented. The study recommended that organizations rigorously implement audit recommendations and prioritize feasibility studies for projects. A key strength of this research was its extensive fourteen-year longitudinal dataset, but it lacked perspectives from the audited organizations, limiting a balanced view of compliance challenges.

Sallwa (2022) examined the influence of procurement audit on procurement effectiveness of public organizations. The study investigated compliance audit, value for money audit, and strategic audit as proxies for the independent variable. A survey research design was adopted, targeting five public organizations in Dar Es Salaam, Tanzania, including TRA, TTCL, DCC, MSD, and TANESCO. From a population of 250 staff, 154 respondents were selected using snowball sampling techniques. Primary data were gathered through self-administered questionnaires, while secondary data were compiled from four PPRA reports. Data analysis involved inferential statistics, specifically correlation and multiple regression using IBM SPSS 23. The findings revealed that value for money audit exerted the highest significant influence on effectiveness, followed by compliance audit, whereas strategic audit was found to be insignificant. The study recommended that the government and PPRA prioritize the implementation of audit recommendations to enhance public fund management. A strength was the triangulation of primary data with official PPRA performance reports, while a critique is that the snowball sampling might have introduced selection bias among the respondents.

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C. Theoretical Review

➢ *Agency Theory*

This study is theoretically anchored on Agency Theory, which was fundamentally propounded by Stephen Ross and Barry Mitnick in 1972, and later refined by Jensen and Meckling in 1976. This theory explores the contractual relationship where the principal (the public/government) delegates authority to an agent (procurement officials/contractors) to perform services on their behalf. In the context of Nigerian public infrastructure, a natural conflict of interest often arises, as agents may prioritize personal gain over the principal's objectives, leading to the "contractor cartels" and inflated costs identified by Ajaelu et al. (2021).

Agency Theory is particularly relevant in this study, because it identifies information asymmetry as a primary driver of project failure. Samuels (2021) posits that procurement auditing serves as a vital diagnostic tool to mitigate this asymmetry by enhancing transparency. While the theory is criticized for its narrow focus on self-interest and its potential to encourage the "defensive" and rigid procurement behaviors noted by Bergman (2023), it effectively explains why a multidimensional audit framework is essential. By integrating internal controls, compliance, and ICT-based monitoring, the principal can effectively curb the opportunistic behavior of agents, thereby ensuring that budget variances and cost overruns are minimized to optimize financial performance (Appiah et al., 2023; Asiedu & Adaku, 2020).

III. METHODOLOGY

This study adopted a cross-sectional survey research design to gather perceptual data at a single point in time from relevant personnel across selected federal Ministries, Departments, and Agencies (MDAs) in Nigeria. This approach facilitated efficient hypothesis testing through regression-based analysis, examining the effects of procurement audit practices on the financial performance of government projects.

This study population comprises procurement officers, internal auditors, finance officers, and project managers directly involved in the oversight and execution of procurement processes within the selected federal Ministries, Departments, and Agencies (MDAs). These entities include the Federal Ministry of Works and Housing, the Federal Ministry of Budget and Economic Planning, the Federal Ministry of Finance, the Tertiary Education Trust Fund (TETFund), the Federal Capital Development Authority (FCDA), the Niger Delta Development Commission (NDDC), the Bureau of Public Procurement (BPP), and the Office of the Accountant General of the Federation. These organizations were purposively selected due to their central roles in the execution, funding, procurement, and auditing of major government projects, rendering them highly pertinent to investigating the influence of audit practices on financial performance in the Nigerian public sector.

From this population, a sample of 200 respondents was drawn using a stratified sampling technique, with the organizations serving as strata to ensure adequate representation from each entity. An equal allocation strategy assigned 25 respondents to each of the eight organizations. This equal allocation strategy was justified by: (i) ensuring balanced cross-organizational comparability under common regulatory frameworks; (ii) minimizing bias from unknown or variable subgroup population figures; and (iii) aligning with established public-sector survey practices where equal stratification enhances subgroup estimate precision and statistical power for detecting meaningful relationships. Data were collected using a structured questionnaire employing a five-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree) to capture respondents' agreement levels based on professional experience. Ethical considerations were observed throughout the study, including obtaining informed consent, ensuring respondent anonymity and confidentiality. The measurement scale for each variable is presented in Table 1.

Table 1 Measurement Scale per Variable

Variable	Number of Items	Measurement Scale Details	Sources
Internal Control Audit Practices (INTCAP)	5	Ordinal	Kamau & Rotich (2015); Al-Hawatmeh & Al-Hawatmeh (2016); Basheka (2017)
Compliance Audit Practices (COMPAP)	5	Ordinal	Alfraih (2016); Kavula et al. (2018); Okoth (2019)
Tendering Process Audit Practices (TENPAP)	5	Ordinal	Etse & Asenso-Boakye (2014); Waruguru (2015); Njagi & Ismail (2017)
ICT-Based Audit Practices (ICTBAP)	5	Ordinal	Lemayian & Moronge (2018); Kong & Nelson (2020); Ahmad et al. (2023)
Value-for-Money Audit Practices (VFMAP)	5	Ordinal	Kalubanga & Kakwezi (2013); Opiyo (2015); Nsiah-Asare & Prempeh (2016); Botlhale (2017)
Financial Performance (FINPERF) - Dependent Variable	6	Ordinal	Chong et al. (2009); Alinaitwe et al. (2013); Sarmento & Renneboog (2017); Junita et al. (2018)

Source: Authors Compilation, 2026.

Data analysis utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 3. PLS-SEM was chosen for its robustness with complex models, small samples, and non-normal data. After screening for multicollinearity and outliers, a two-step evaluation followed. First, the measurement model was assessed for reliability and validity using composite reliability, Cronbach's alpha, and HTMT criteria. Second, the structural model was evaluated

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through path coefficients, R^2, and f^2 using 5,000 bootstrapping subsamples to test the hypothesized impact of procurement audits on financial performance.

IV. 4.0 DATA PRESENTATIONS, ANALYSIS AND RESULTS

A. Data Presentation

A total of 200 copies of questionnaires were administered across eight federal MDAs in Nigeria. 161 copies were returned and retained as valid responses after screening, representing an 80.5% response rate. The distribution was: Works and Housing (19), Budget and Economic Planning (21), Finance (23), TETFund (18), FCDA (20), NDDC (19), BPP (24), and Office of the Accountant General (17). This high response rate far exceeds the 50% threshold commonly recommended in survey research, thereby strengthening statistical reliability and supporting robust PLS-SEM analysis.

Table 2 Descriptive Statistics

Variables	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
INTCAP1-5	3.979	4.000	1.000	5.000	1.040	2.080	-1.457
COMPAP1-5	4.000	4.000	1.000	5.000	1.045	1.927	-1.443
TENPAP1-5	3.867	4.000	1.000	5.000	0.943	0.935	-0.940
ICTBAP1-5	4.181	4.000	1.000	5.000	1.000	3.315	-1.784
VFMAP 1-5	3.990	4.000	1.000	5.000	1.020	1.684	-1.279
FINPERF1-6	3.605	4.000	1.000	5.000	1.038	0.620	-0.859

Source: SmartPLS 3 Output, 2026.

Table 2 presents descriptive statistics for 135 respondents regarding procurement audit practices and financial performance in Nigeria. The independent variables, Internal Control (M=3.979), Compliance (M=4.000), Tendering (M=3.867), ICT-Based (M=4.181), and Value-for-Money (M=3.990) showed high positive perceptions. ICT-Based Audit Practices recorded the highest mean, highlighting a strong consensus on the role of digital tools in enhancing transparency and fraud reduction.

The dependent variable, Financial Performance (M=3.605), exhibits a lower mean than the audit constructs. While respondents acknowledged that audit practices aid cost control, the lower score suggested that challenges like budget variances and cost overruns remained persistent in Nigerian government projects. Statistically, all constructs displayed negative skewness (-0.859 to -1.784), indicating that responses were clustered toward the "Agree" and "Strongly Agree" ends of the scale. The positive excess kurtosis values, particularly for ICTBAP (3.315), indicated leptokurtic distributions with high peaks. Overall, the results demonstrated that while audit frameworks were perceived favorably, their direct impact on achieving absolute cost efficiency in project execution was still evolving.

B. Data Analysis and Results

➢ *Assessment of the Measurement Model*

The measurement model was evaluated to ensure the reliability and validity of the constructs before examining the structural relationships. This assessment focused on indicator reliability (factor loadings), internal consistency reliability (Cronbach's Alpha, rho_A, and Composite Reliability), convergent validity (Average Variance Extracted - AVE), and discriminant validity (Heterotrait-Monotrait ratio - HTMT).

Table 3 Indicator Reliability, Internal Consistency Reliability, and Convergent Validity

S/N	Variables	Factor Loadings	Cronbach's Alpha	rho_A	Composite Reliability	AVE
1.	**Internal Control Audit Practices (INTCAP)**		0.938	0.940	0.953	0.803
	INTCAP1	0.888				
	INTCAP2	0.902				
	INTCAP3	0.870				
	INTCAP4	0.948				
	INTCAP5	0.870				
2.	**Compliance Audit Practices (COMPAP)**		0.942	0.944	0.956	0.812
	COMPAP1	0.907				
	COMPAP2	0.951				
	COMPAP3	0.843				
	COMPAP4	0.866				
	COMPAP5	0.935				
3.	**Tendering Process Audit Practices (TENPAP)**		0.925	0.926	0.944	0.772
	TENPAP1	0.845				
	TENPAP2	0.920				
	TENPAP3	0.812				
	TENPAP4	0.902				
	TENPAP5	0.910				

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4.	**ICT-Based Audit Practices (ICTBAP)**		0.942	0.950	0.956	0.813
	ICTBAP1	0.872				
	ICTBAP2	0.871				
	ICTBAP3	0.948				
	ICTBAP4	0.881				
	ICTBAP5	0.933				
5.	**Value-for-Money Audit Practices (VFMAP)**		0.940	0.948	0.955	0.811
	VFMAP1	0.930				
	VFMAP2	0.939				
	VFMAP3	0.930				
	VFMAP4	0.931				
	VFMAP5	0.761				
6.	**Financial Performance (FINPERF)**		0.939	0.947	0.952	0.768
	FINPERF1	0.873				
	FINPERF2	0.923				
	FINPERF3	0.860				
	FINPERF4	0.900				
	FINPERF5	0.809				
	FINPERF6	0.888				

Source: SmartPLS 3 Output, 2026.

The reliability and validity analysis in Table 3 confirmed that all constructs exhibit exceptional measurement properties. Cronbach's Alpha values range from 0.925 to 0.942, significantly exceeding the standard 0.70 threshold, while Composite Reliability scores (0.944–0.956) and rho_A values (0.926–0.950) further demonstrate superior internal consistency. Average Variance Extracted (AVE) values range from 0.768 to 0.813, all comfortably above the recommended 0.50 criterion, which confirms robust convergent validity across all variables.

Individual factor loadings are highly satisfactory, ranging from 0.761 to 0.951, indicating that each indicator represents its intended latent construct with a high degree of precision. Notably, Compliance Audit Practices (AVE=0.812) and ICT-Based Audit Practices (AVE=0.813) showed the highest levels of variance captured, reinforcing the strategic importance of legal adherence and digital oversight in the Nigerian public sector. These results affirm the technical robustness and reliability of the measurement model, making it suitable for the subsequent structural model evaluation to examine the relationship between procurement audit practices and the financial performance of government projects in Nigeria.

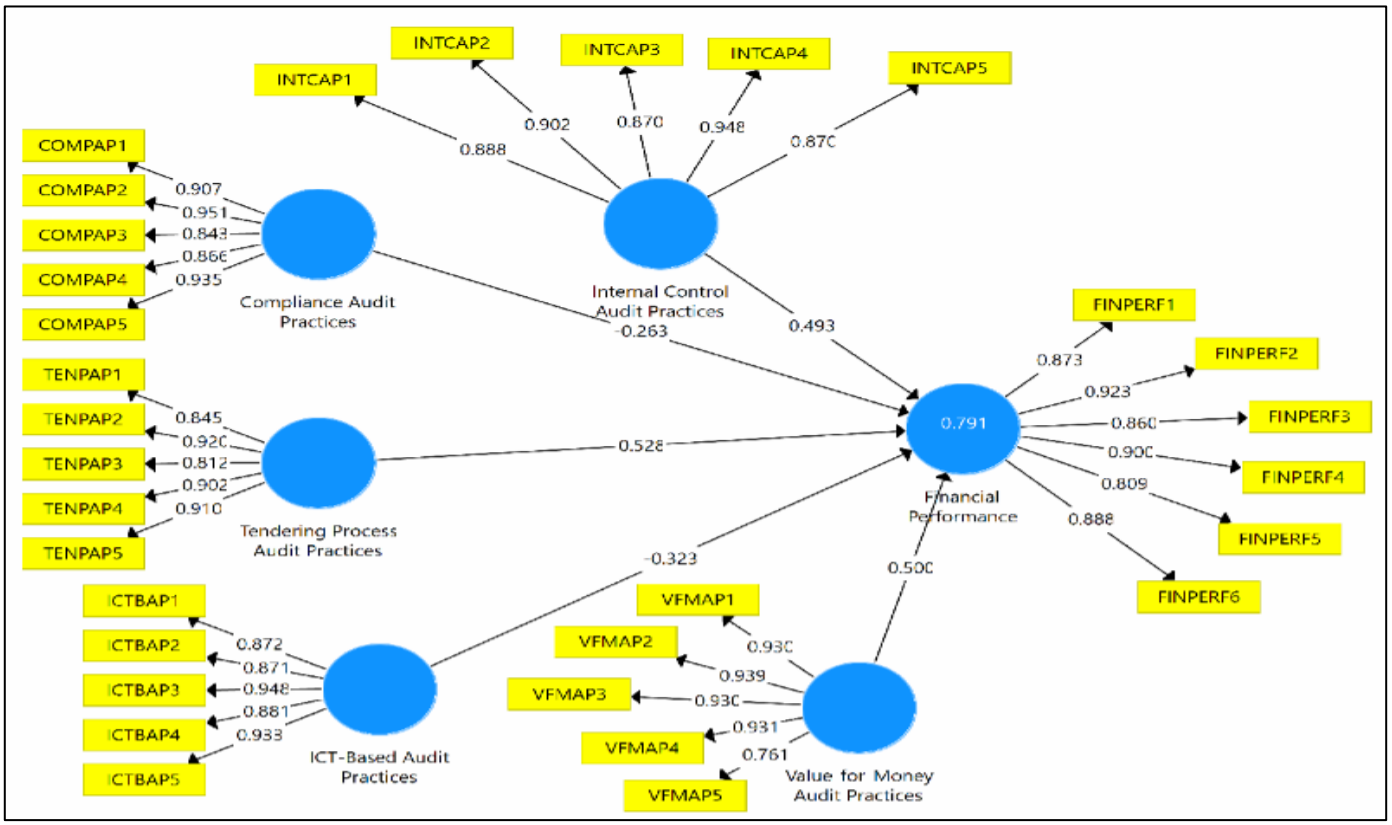

Fig 2 Factor Loadings

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Table 4 Discriminant Validity (Heterotrait-Monotrait Ratio - HTMT)

Variables	1	2	3	4	5	6
1. Compliance Audit Practices						
2. Financial Performance	0.574					
3. ICT-Based Audit Practices	0.698	0.606				
4. Internal Control Audit Practices	0.669	0.618	0.689			
5. Tendering Process Audit Practices	0.650	0.709	0.700	0.661		
6. Value-for-Money Audit Practices	0.667	0.635	0.779	0.593	0.685	

Source: SmartPLS 3 Output, 2026.

Table 4 reported the Heterotrait-Monotrait (HTMT) ratios for discriminant validity. All values range from 0.574 to 0.779, well below the conservative 0.85 and liberal 0.90 thresholds (Henseler et al., 2015), confirming that the constructs, Compliance, Financial Performance, ICT-Based, Internal Control, Tendering Process, and Value-for-Money Audit Practices are empirically distinct. The highest ratios appear between Value-for-Money and ICT-Based Audit Practices (0.779) and between Financial Performance and Tendering Process Audit Practices (0.709), indicating adequate distinction alongside expected theoretical overlap.

➢ *Assessment of the Structural Model*

In this study, the structural model was assessed using Inner Variance Inflation Factor (VIF), effect size (f^2), coefficient of determination (R^2), standardized root mean square residual (SRMR), and predictive relevance (Q^2) to evaluate the explanatory and predictive strength of the model.

Table 5 Inner VIF, Effect Size (f^2), R Square (R^2), Model Fit and Predictive Relevance (Q^2)

Assessment Criteria	Values/Results	Threshold/Criterion	Conclusion
Inner VIF (Multicollinearity)	INTCAP: 2.646; COMPAP: 2.823; TENPAP: 1.247; ICTBAP: 4.469; VFMAP: 3.642	< 5 (Hair et al., 2022)	No serious multicollinearity
Effect Size (f^2)	INTCAP: 0.152; COMPAP: 0.042; TENPAP: 0.313; ICTBAP: 0.048; VFMAP: 0.138	≥0.35 Large; ≥0.15 Medium; ≥0.02 Small	TENPAP has the strongest impact
R^2 (Explained Variance)	0.791 (Adjusted 0.783)	≥0.67 Substantial (Chin, 1998)	Substantial explanatory power
Model Fit – SRMR	0.086	≤0.080 (Hu & Bentler, 1999)	Marginal/Acceptable fit
Predictive Relevance (Q^2_predict)	Financial Performance: 0.779	> 0 (Shmueli et al., 2019)	High predictive power

Source**:** SmartPLS 3 Output, 2026.

Table 5 presents the structural model assessment, indicating strong explanatory and predictive capacity. All Inner VIF values were below 5, confirming the absence of serious multicollinearity among the predictor variables. The effect size results showed that Tendering Process Audit Practices had the strongest effect on Financial Performance, followed by Internal Control Audit Practices, while the other variables recorded smaller but meaningful effects. The model explained 79.1% of the variance in Financial Performance (R^2 = 0.791), indicating substantial explanatory power. Although the SRMR value of 0.086 slightly exceeded the recommended threshold, it still reflected an acceptable model fit. In addition, the Q^2_predict value of 0.779 confirmed that the model possesses strong predictive relevance and is suitable for hypothesis testing.

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➢ *Hypothesis Testing and Path Coefficients*

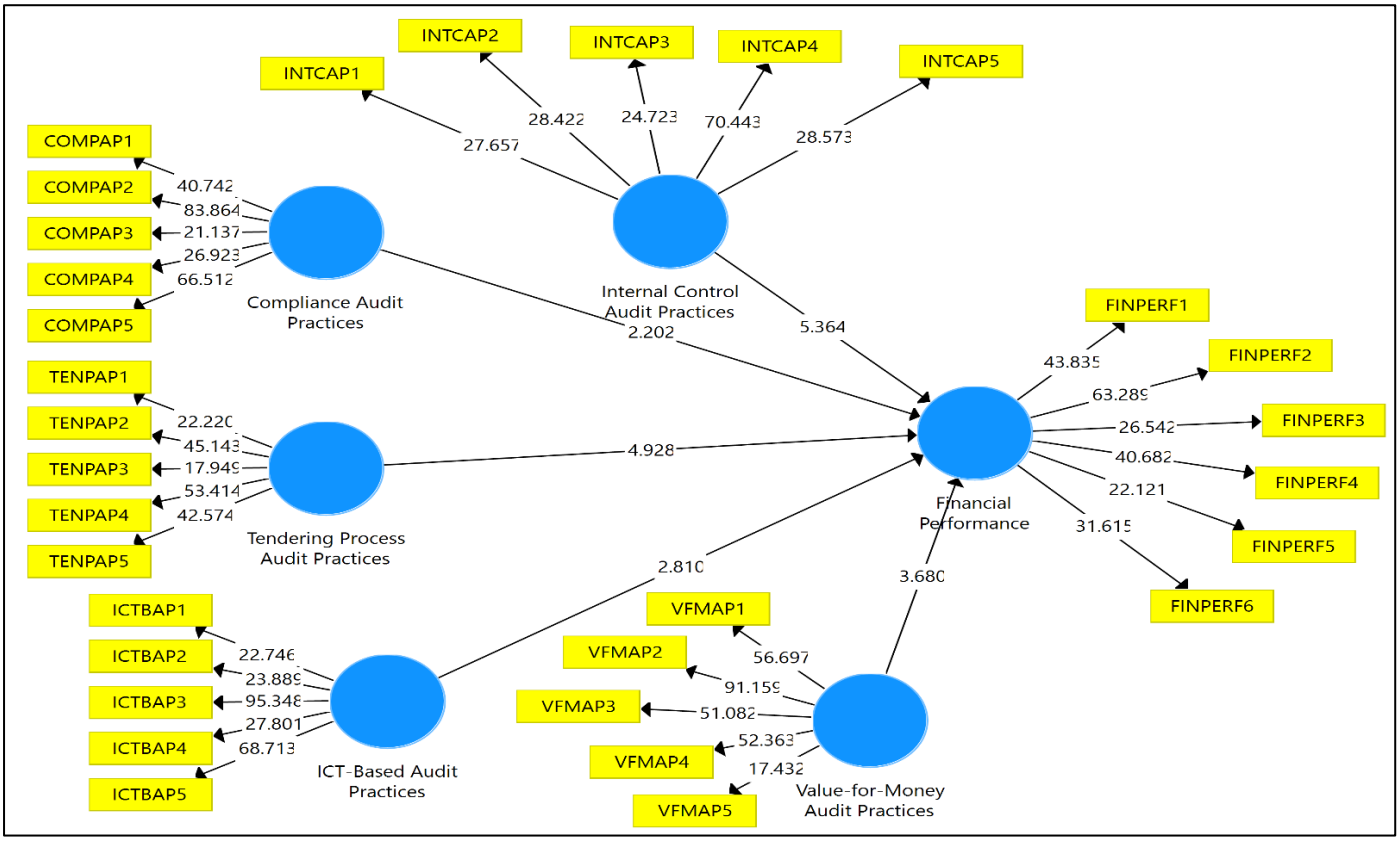

Fig 3 Path Coefficient
Source: SmartPLS 3 Output, 2026.

Table 6 Path Coefficients and Hypothesis Testing Results

Path (Hypothesis)	Original Sample (O)	T Statistics	P Values	Decision
Internal Control Audit Practices → Financial Performance	0.493	5.364	0.000	Supported
Compliance Audit Practices → Financial Performance	-0.263	2.202	0.038	Supported
Tendering Process Audit Practices → Financial Performance	0.528	4.928	0.000	Supported
ICT-Based Audit Practices → Financial Performance	-0.323	2.810	0.012	Supported
Value-for-Money Audit Practices → Financial Performance	0.500	3.680	0.000	Supported

Source: SmartPLS 3 Output, 2026.

- *Key Findings*

✓ Internal Control Audit Practices significantly and positively influence Financial Performance (beta = 0.493, $p < 0.001$), confirming that segregation of duties and rigorous authorization procedures are foundational for cost efficiency.
✓ Compliance Audit Practices significantly but negatively impact Financial Performance (beta = -0.263, $p < 0.05$), indicating that rigid adherence to complex regulations may be leading to delivery inefficiencies or "defensive" procurement behaviors.
✓ Tendering Process Audit Practices significantly and positively affect Financial Performance. With the highest path coefficient (beta = 0.528, $p < 0.001$), it is the most critical driver for ensuring project delivery within approved contract sums and minimizing contractor cartels.
✓ ICT-Based Audit Practices significantly but negatively affect Financial Performance (beta = -0.323, $p < 0.05$). This suggests that while digital tools are present, their current implementation may be causing procedural delays or incurring high initial costs that temporarily degrade financial outcomes.
✓ Value-for-Money Audit Practices significantly and positively impact Financial Performance (beta = 0.500, $p < 0.001$). This underscores that auditing for economy, efficiency, and effectiveness is essential for reducing waste in project implementation.

C. Discussion of Findings

➢ *H_{01}: Internal Control Audit Practices Have No Significant Effect on the Financial Performance of Government Projects in Nigeria.*

The null hypothesis was rejected, as the path coefficient of 0.493 (t = 5.364, p = 0.000) indicated a strong significant positive effect. This implies that the implementation of structural checks, such as the segregation of duties and rigorous authorization procedures, serves as a foundational driver for cost efficiency within Nigerian MDAs. By ensuring that no single individual controls all stages of a transaction, these practices effectively mitigate the vulnerabilities related

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to fraud and financial mismanagement. This finding aligns with Agboola and Tella (2021), who established that strong internal control frameworks reduce mismanagement in Nigerian firms. Similarly, Twesigye et al. (2022) argued that robust control activities are essential for realizing procurement effectiveness and enhancing institutional accountability.

- *H_{02}: Compliance Audit Practices Have No Significant Effect On The Financial Performance Of Government Projects In Nigeria.*

The null hypothesis was rejected, but the results revealed a significant negative effect (beta = -0.263, t = 2.202, p = 0.038). This suggested that during the review period, rigid adherence to complex regulatory frameworks may have inadvertently led to delivery inefficiencies or "defensive" procurement behaviors that degraded financial outcomes. While compliance is intended to prevent corruption, excessive bureaucracy can stall project timelines and increase transaction costs. This finding corroborates the "distorted incentives" theory proposed by Bergman (2023), who noted that municipality audits in Sweden sometimes led to rigid, lowest-price tendering that compromised long-term performance. It also supports Elike (2025), who highlighted that inconsistent enforcement and complex compliance layers often undermine accountability in the Nigerian public sector.

- *H_{03}: Tendering Process Audit Practices Have No Significant Effect on the Financial Performance of Government Projects in Nigeria.*

The null hypothesis was rejected, with the highest path coefficient of 0.528 (t = 4.928, p = 0.000), confirming a dominant significant positive impact. This indicated that auditing the tendering stage specifically ensuring fair bid evaluation and open competition is the most critical mechanism for minimizing the influence of "contractor cartels" and ensuring projects are completed within approved contract sums. These results are consistent with Ajaelu et al. (2021), who found that objective tendering milestones are vital for successful project delivery in Nigeria. Furthermore, Matto and Magali (2025) established that technical and financial examinations of tenders are significantly associated with preventing project failure and moral hazard.

- *H_{04}: ICT-Based Audit Practices Have No Significant Effect on the Financial Performance of Government Projects in Nigeria.*

The null hypothesis was rejected, showing a significant negative effect (beta = -0.323, t = 2.810, p = 0.012). This implies that while digital tools and e-tendering platforms are being adopted, their current implementation in Nigerian MDAs may be incurring high initial costs or creating procedural bottlenecks that temporarily hinder financial performance. The lack of adequate technical training or stable infrastructure may be causing a "productivity paradox" where digital automation has not yet translated into cost savings. This aligns with Małys (2022), who observed that high technology intensity does not always yield immediate financial returns. It also echoes the concerns of Musa and Abraham (2025) regarding the need for robust technological infrastructure to ensure that ICT adoption strengthens, rather than complicates, internal control mechanisms.

- *H_{05}: Value-for-Money Audit Practices Have No Significant Effect on the Financial Performance of Government Projects in Nigeria.*

The null hypothesis was rejected (beta = 0.500, t = 3.680, p = 0.000), indicating a strong significant positive effect. This underscored that auditing for the "3Es", economy, efficiency, and effectiveness is essential for reducing systemic waste and ensuring that public infrastructure achieves its intended developmental objectives. By shifting the focus from the lowest initial price to total life-cycle costs, these practices optimize the utilization of scarce resources. This result corroborates Sallwa (2022), who found that value-for-money audits exert a higher influence on effectiveness than traditional compliance audits. Additionally, Igwe et al. (2025) highlighted that achieving value for money is a prerequisite for insulating procurement decisions from political interference and achieving long-term project sustainability.

V. CONCLUSION AND RECOMMENDATIONS

In conclusion, this study established that internal control, compliance, tendering process, ICT-based, and value-for-money audit practices significantly influence the financial performance of Nigerian government projects. While tendering, value-for-money, and internal control practices emerged as powerful drivers of cost efficiency, the significant negative impacts of compliance and ICT-based audits highlight critical bottlenecks in regulatory rigidity and digital implementation. These practices explain 79.1% of the variance in financial outcomes, proving that a synchronized audit framework is essential for mitigating chronic cost overruns. Based on the empirical strength and significance of the tested relationships, the following recommendations are proposed to enhance the financial performance of government projects in Nigeria:

- Given that Tendering Process Audit Practices is the most powerful driver of performance, the Bureau of Public Procurement (BPP) and relevant MDAs should institutionalize more rigorous, independent audits of the bidding stage. This includes the deployment of randomized audit spot-checks on pre-qualification exercises to dismantle "contractor cartels" and ensure that contract awards are based strictly on technical competence and cost accuracy.
- To leverage the significant positive impact of Value-for-Money Audit Practices, government oversight bodies must transition from traditional "tick-box" compliance to performance-based auditing. It is recommended that the Office of the Auditor-General for the Federation adopts the "3Es" framework (Economy, Efficiency, and Effectiveness) as the primary metric for project evaluation, focusing on total life-cycle costs rather than just the lowest initial tender price.
- To maximize the gains from Internal Control Audit Practices, MDAs should strengthen their internal audit units by ensuring total administrative independence and regular rotation of personnel. Strengthening the segregation of duties and automating authorization workflows will reduce the human interference that leads to financial misappropriation and unauthorized project scope changes.

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- Since ICT-Based Audit Practices demonstrated a significant negative effect, the government should address the "productivity paradox" by investing in comprehensive technical capacity building for auditors. Rather than merely adopting software, there must be an integrated rollout of stable technological infrastructure and specialized training to ensure that digital tools reduce, rather than increase, procedural lead times and transaction costs.
- Regarding the significant negative impact of Compliance Audit Practices, the Federal Government should undertake a regulatory review to simplify the Public Procurement Act 2007. The focus should be on reducing "defensive" procurement behaviors and excessive bureaucracy that lead to delivery inefficiencies, ensuring that compliance serves as a facilitator of transparency rather than a bottleneck to project execution.

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