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## Transparency and Accountability in Nigerian Public Institutions through Digital Transformation

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### ABSTRACT

Corruption and lack of transparency have long weakened Nigeria's governance structures, undermining public trust and impeding socioeconomic development. This paper explores how digital transformation can strengthen accountability mechanisms in public institutions. It focuses on the integration of digital procurement systems, open budget portals, and blockchain-enabled record-keeping to track public spending and minimize opportunities for misappropriation. Drawing from policy analysis and literature on anti-corruption agencies and civil society organizations, the study evaluates current digital accountability tools deployed in Nigeria and identifies structural, institutional, and sociotechnical barriers to their effectiveness. The paper further proposes a multi-layered governance framework that aligns technology adoption with legislative reform, capacity building, and citizen engagement. Findings suggest that while digital tools offer substantial promise, their transformative impact depends on political will, interoperability of systems, and inclusive design. The study contributes to scholarship on e-governance, public sector reform, and anti-corruption in sub-Saharan Africa.

**Keywords:** Transparency, Accountability, Digital Transformation, Society, Africa, Corruption, Public Institutions,

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### I. INTRODUCTION

Nigeria, Africa's most populous nation and largest economy, has long grappled with systemic corruption that permeates nearly every tier of its public administration.



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From federal ministries and state agencies to local government councils, the opacity of public financial management has continued to erode institutional credibility and drain national resources. The Transparency International Corruption Perceptions Index (CPI) has persistently ranked Nigeria among countries with significant governance deficits, reflecting widespread public disillusionment with government accountability (Transparency International, 2023). Decades of reform efforts, ranging from anticorruption legislation to institutional restructuring, have yielded limited results, largely because the underlying information asymmetries that enable corruption remained unaddressed.

The emergence of digital transformation as a governance paradigm offers a new frontier for tackling entrenched accountability challenges. Digital technologies, including e-procurement platforms, open government data portals, and distributed ledger systems such as blockchain, carry the potential to automate compliance, enforce transparency, and create auditable trails of public decision-making. Several countries, including Estonia, South Korea, and Rwanda, have demonstrated that strategic technology deployment within public institutions can significantly reduce corruption and improve service delivery (Pathak et al., 2020; Meijer, 2014). Yet the adoption of similar tools in Nigeria has been fragmented, underfunded, and frequently undermined by political resistance.

This paper examines the intersection of digital transformation and accountability in Nigerian public institutions. It investigates the extent to which existing digital tools address transparency deficits, explores the barriers limiting their effectiveness, and proposes a governance framework to deepen their impact. The research draws on secondary data from government reports, policy documents, academic literature, and evaluations by civil society organizations and international development agencies active in Nigeria's governance reform ecosystem. The paper proceeds as follows: Section 2 provides a theoretical framework grounding the study in accountability theory and digital governance. Section 3 reviews relevant literature. Section 4 presents the research methodology. Section 5 analyzes current digital accountability tools in Nigeria. Section 6 examines barriers to effectiveness. Section 7 proposes a multi-layered reform framework. Section 8 concludes with recommendations and avenues for future research.

### **1.1 Theoretical Framework**

#### **1.1.1 Accountability Theory in Public Administration**

Accountability in public administration refers to the obligation of public officials and institutions to answer for the use of public authority, resources, and power (Schedler, 1999). Bovens (2007) distinguishes between horizontal accountability—among state institutions—and vertical accountability, which involves citizens and civil society holding government to account. Both dimensions are critical in democratic governance, and both are weakened when information about government activities is inaccessible or manipulated. The principal-agent framework further illuminates the corruption problem: citizens (principals) delegate authority to government officials (agents), but information asymmetry allows agents to act in self-interest rather than the public interest (Moe, 1984). Reducing information asymmetry through transparency mechanisms directly addresses this governance failure by enabling principals to monitor agent behavior and impose sanctions for deviation from public mandates.



### **1.1.2 Digital Governance and E-Government Theory**

Digital governance refers to the use of information and communication technologies (ICTs) to improve government processes, service delivery, and citizen engagement (Heeks, 2006). It builds on earlier e-government frameworks that sought to automate administrative functions but extends further by emphasizing transformative restructuring of public institutions and power relations. Dunleavy et al. (2006) propose the "digital era governance" model, which argues that ICT adoption fosters reintegration of fragmented services, holistic organizational change, and digitalization of administrative data. From an institutional perspective, digital transformation can alter the incentive structures within public agencies by making deviant behavior more detectable and accountability mechanisms more effective. However, technology adoption alone is insufficient; it must be accompanied by legislative frameworks, administrative culture change, and sustained political will (Ciborra, 2005). This aligns with the sociotechnical systems theory, which holds that effective technological change requires simultaneous transformation of the social and organizational contexts in which technology is embedded (Trist, 1981).

### **1.1.3 Conceptual Framework**

This study adopts an integrated conceptual framework that synthesizes accountability theory with digital governance perspectives. Three analytical dimensions guide the analysis: (1) technological infrastructure, the availability and quality of digital tools; (2) institutional context, the legal, organizational, and political environment shaping technology use; and (3) social dynamics, citizen engagement, civil society oversight, and demand for accountability. Effective digital transformation for accountability requires alignment across all three dimensions.

## **2. LITERATURE REVIEW**

### **2.1 Corruption and Governance in Nigeria**

The literature on Nigerian governance documents persistent and multidimensional corruption across public institutions. Omotoso (2010) traces the historical roots of corruption to colonial administrative practices that separated public authority from public accountability, a pattern reinforced by successive military regimes. Subsequent civilian administrations, while rhetorically committed to reform, have largely failed to break patronage networks that sustain corrupt practices (Smith, 2010).

Empirical studies identify specific sectors—public procurement, budget execution, revenue collection, and land administration—as particularly corruption-prone (Ijewereme, 2015). The Nigerian Extractive Industries Transparency Initiative (NEITI) and the Procurement Act of 2007 represented early attempts at institutionalizing transparency, but implementation has been inconsistent and enforcement weak (Kpundeh, 2004). The Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and Other Related Offences Commission (ICPC) have recorded notable prosecutions but face persistent capacity and independence challenges (Ogundiya, 2010).



## 2.2 Digital Tools for Transparency and Accountability

A growing body of literature explores the potential of digital technologies to enhance public sector transparency. Peixoto and Fox (2016) review evidence from open government data initiatives and find that digital transparency tools improve accountability primarily when they are accompanied by mechanisms that translate information into citizen action. Open data portals, such as Nigeria's OPEN TREASURY system, provide public access to budget and expenditure data, but research by BudgIT (2022) indicates that accessibility, comprehensiveness, and real-time updates remain significant limitations.

Digital procurement platforms, particularly the Government Integrated Financial Management Information System (GIFMIS) and the National Open Contracting Portal (NOCOPO), have been assessed by multiple studies. Bashir and Mustapha (2019) find that GIFMIS adoption has reduced duplicate payments and improved budget tracking in pilot ministries, though rollout remains incomplete. The NOCOPO platform aligns with the Open Contracting Data Standard (OCDS) and has improved procurement data disclosure, but the absence of proactive enforcement mechanisms limits deterrence (Okafor & Udeh, 2021).

Blockchain technology has attracted increasing interest in governance literature for its capacity to create immutable, tamper-proof records. Swan (2015) identifies government record-keeping, land registries, and identity management as key blockchain applications in developing countries. Ojo and Adebayo (2022) evaluate a pilot blockchain land registry in Lagos State and find early evidence of reduced title fraud and faster transaction processing, though scalability and electricity infrastructure remain challenges. Globally, Estonia's X-Road infrastructure is frequently cited as a model for blockchain-enabled public administration, offering lessons for countries with weaker institutional baselines (Drechsler & Madise, 2016).

## 2.3 Barriers to Digital Accountability in Developing Countries

While the theoretical benefits of digital governance are well-established, the literature consistently identifies implementation barriers in developing country contexts. Heeks (2003) famously characterizes many e-government projects as "design-reality gaps", failures arising from misalignment between system design assumptions and the realities of the implementing context. These gaps manifest in terms of information (data quality and availability), technology (infrastructure and connectivity), management (bureaucratic culture and capacity), and politics (elite resistance to transparency).

Ndou (2004) identifies low digital literacy, inadequate ICT infrastructure, financial constraints, and lack of interoperability as critical barriers in sub-Saharan Africa. These structural challenges are compounded in Nigeria by inconsistent electricity supply, uneven internet penetration between urban and rural areas, and limited technical capacity within public agencies (NCC, 2023). Additionally, Lagundoye and Obi (2021) highlight political economy factors: officials whose power depends on information asymmetry actively resist digital transparency reforms. Civil society organizations (CSOs) play a crucial role in bridging the gap between digital disclosure and actual accountability, yet their capacity to engage with complex financial data remains limited in Nigeria (Ake, 2010). International donors have funded several data literacy and budget monitoring programs, but sustainability beyond project cycles is a recurring challenge (ODI, 2019).



### 3. RESEARCH METHODOLOGY

This study employs a qualitative research design, using document analysis and systematic literature review as primary methodological approaches. The choice of qualitative methodology is appropriate given the complexity of the governance, institutional, and sociotechnical dimensions under examination and the limitations of available quantitative data on digital governance outcomes in Nigeria. The literature review was conducted systematically, drawing from peer-reviewed journal articles, government policy documents, reports by international development organizations (including the World Bank, UNDP, and UNODC), and publications by Nigerian civil society organizations such as BudgIT, Publish What You Fund, and the Connected Development Initiative. Databases consulted include JSTOR, Google Scholar, Scopus, and the African Journals Online (AJOL) platform. Search terms included combinations of: "digital transformation Nigeria," "e-governance accountability," "open data Nigeria," "blockchain public sector Africa," "anticorruption technology developing countries," and related variants.

Policy documents reviewed include the Nigerian National Digital Economy Policy and Strategy (2020–2030), the Fiscal Responsibility Act (2007), the Public Procurement Act (2007), the Freedom of Information Act (2011), and reports from the Budget Office of the Federation and the Office of the Accountant-General of the Federation. Institutional reports from the EFCC, ICPC, and NEITI were also analyzed. The study is limited by the availability and reliability of official data on digital governance systems, which is itself a function of the transparency deficits being studied. Where official data are unavailable or of uncertain quality, the study triangulates across multiple secondary sources to develop robust analytical conclusions. The findings are interpreted with recognition of these limitations.

I.

### 4. DIGITAL ACCOUNTABILITY TOOLS IN NIGERIA: AN ASSESSMENT

#### 4.1 Government Integrated Financial Management Information System (GIFMIS)

The GIFMIS, introduced in Nigeria in 2011 under the Coordinating Minister of the Economy, represents one of the most significant digital governance initiatives in the country's public financial management history. Built on the Oracle E-Business Suite, GIFMIS integrates budget preparation, execution, procurement, and financial reporting across federal ministries, departments, and agencies (MDAs). By automating payment processes and linking budget lines to actual expenditures, the system was designed to eliminate ghost workers, reduce payment duplication, and provide real-time financial data to oversight institutions.

Assessments of GIFMIS outcomes present a mixed picture. The World Bank (2020) credits the system with improving fiscal discipline and reducing unauthorized virement in participating MDAs. However, coverage remains partial—many agencies continue to operate parallel manual systems, undermining data integrity. The Office of the Accountant-General of the Federation (OAGF) has acknowledged persistent data inconsistencies between GIFMIS records and actual transactions, attributable to inadequate staff training, system customization failures, and irregular maintenance (OAGF, 2021).



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### **4.2 Open Treasury Portal and Budget Transparency**

The Open Treasury Portal, launched in 2019, represents a significant step toward fiscal transparency by making federal government payment data publicly accessible online. The portal publishes daily transaction records, including payees, amounts, and budget codes, enabling citizens and journalists to scrutinize government expenditures in near-real time. Budget (2022) acknowledges the portal as a landmark transparency initiative but identifies critical limitations: data quality issues, frequent downtime, gaps in historical data, and absence of state-level disaggregation. Nigeria's open budget score, as measured by the International Budget Partnership's Open Budget Survey (2021), improved marginally to 42 out of 100, reflecting progress in budget publication but persistent gaps in legislative oversight and audit effectiveness. Despite improvements in federal-level disclosure, sub-national transparency remains extremely limited, with most state governments failing to publish comprehensive budget or expenditure data.

### **4.3 National Open Contracting Portal (NOCOPO)**

Established under the Bureau of Public Procurement (BPP), NOCOPO enables the public disclosure of federal procurement data in compliance with the Open Contracting Data Standard. The portal covers contract awards, bid evaluations, and project completion status for federal procurements. Transparency advocates have praised NOCOPO as a foundational accountability tool, noting that it facilitates investigative journalism and civil society monitoring of public contracts. Nevertheless, significant limitations constrain NOCOPO's impact. Okafor and Udeh (2021) report that data completeness is inconsistent—many contracts are published without award details or implementation milestones—and that the portal lacks integration with GIFMIS, preventing cross-verification of procurement and payment data. Furthermore, the absence of automatic debarment mechanisms for non-compliant contractors means that publication of infractions does not reliably translate into enforcement consequences.

### **4.4 Blockchain Pilots and Digital Identity Systems**

Blockchain applications in Nigerian governance remain experimental. The most prominent is the National Identity Management Commission's (NIMC) national identity database, which incorporates distributed ledger elements to secure citizen identity records. The Bank Verification Number (BVN) system, operated by the Central Bank of Nigeria (CBN), similarly uses cryptographic security to link financial transactions to verified identities, reducing financial fraud and enabling traceback of illicit flows.

The Lagos State land registry pilot, initiated in 2020 in partnership with a technology firm, uses blockchain to record land titles and track ownership transfers. Early results indicate a reduction in fraudulent title claims and disputes, though the pilot covers only a fraction of Lagos properties and relies on legacy data whose accuracy was not independently verified prior to digitization. Scaling such pilots requires resolving interoperability challenges with existing government databases and ensuring that analog-to-digital migration does not embed existing corruption into immutable records.

## **5. BARRIERS TO EFFECTIVE DIGITAL ACCOUNTABILITY**

### **5.1 Infrastructure and Connectivity Deficits**

Nigeria's ICT infrastructure, while growing, remains insufficient to support comprehensive digital governance. The Nigerian Communications Commission (NCC, 2023) reports



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national internet penetration at approximately 55%, but this figure conceals significant geographic disparities: rural northern states have connectivity rates below 20%, while Lagos and Abuja approach 80%. Unreliable electricity supply compounds connectivity challenges, as public institutions in many states experience power outages for more than 12 hours daily, disrupting continuous operation of digital systems. Cloud-based government systems face latency and reliability issues that reduce their utility for real-time data entry and retrieval. These infrastructure limitations not only constrain the reach of digital accountability tools but also create incentives to maintain parallel manual processes, which reintroduce the opacity that digitization sought to eliminate.

### **5.2 Institutional Capacity and Digital Literacy**

Effective use of digital accountability tools requires technical capacity among both government officials and oversight institutions. Nigeria's civil service has historically been characterized by limited technology literacy, high staff turnover, and inadequate training budgets (Nwoye, 2019). Many GIFMIS-trained officials have left the public service for better-compensated private sector roles, leaving agencies with insufficient capacity to fully utilize the systems in place. Legislative oversight bodies, including the National Assembly committees responsible for public accounts and finance, similarly lack the forensic digital capacity to effectively analyze data generated by government financial systems. The Auditor-General's office remains under-resourced relative to the complexity and volume of digital transaction records it is expected to audit (OAGF, 2021).

### **5.3 Political Economy and Elite Resistance**

Perhaps the most fundamental barrier to digital accountability in Nigeria is political. Transparency technologies threaten the information asymmetries on which rent-seeking and patronage networks depend. Lagundoye and Obi (2021) document cases where procurement digitization was delayed or rolled back following resistance from officials whose intermediary roles in contract awards would be eliminated by automated systems. In several states, open budget portals were established to satisfy donor requirements but were not maintained or actively publicized to citizens. The political economy of digital reform thus requires careful attention to incentive structures: without institutional mechanisms that reward transparent behavior and impose costs on opacity, digital tools remain susceptible to capture, circumvention, or abandonment. The selective application of digital oversight—targeting political opponents while protecting allies—further undermines the legitimacy of accountability technology in the eyes of citizens.

### **5.4 Legal and Regulatory Gaps**

Nigeria's legal framework for digital governance contains significant lacunae. The Freedom of Information Act (2011) provides a legal basis for public information access but lacks effective enforcement mechanisms and is inconsistently applied across MDAs (Reporters Without Borders, 2022). The Cybercrimes (Prohibition, Prevention, etc.) Act (2015) contains provisions that have been used to prosecute government critics who publicize corruption evidence obtained through digital means, creating a chilling effect on investigative use of open data. The absence of a comprehensive Data Protection Act with government accountability provisions and an updated Electronic Transactions Act leaves critical aspects of digital governance without a clear legal basis. Procurement digitization is governed by multiple overlapping regulations from the BPP, the CBN, and sector-specific agencies, creating compliance ambiguities and enforcement gaps.



### **5.5 Interoperability and Fragmentation**

Digital accountability in Nigeria is fragmented across multiple systems that do not communicate with each other. GIFMIS, NOCOPO, the Open Treasury Portal, the Integrated Personnel and Payroll Information System (IPPIS), the Treasury Single Account (TSA) platform, and the Budget Implementation and Monitoring System (BIMS) each capture different dimensions of public financial management but lack standardized data formats and application programming interfaces (APIs) for cross-system data exchange. This fragmentation means that comprehensive tracking of public funds—from budget allocation through procurement, payment, and project completion—requires manual reconciliation across systems, reintroducing human discretion and error into a process designed to be automated. Achieving the full accountability potential of existing digital tools requires a government-wide interoperability architecture built on open standards.

II.

## **6. PROPOSED FRAMEWORK FOR DIGITAL ACCOUNTABILITY GOVERNANCE**

Based on the foregoing analysis, this paper proposes a Multi-Layered Digital Accountability Governance (MLDAG) framework for Nigeria. The framework integrates technological, institutional, legal, and social dimensions into a coherent strategy for strengthening accountability through digital transformation.

### **6.1 Layer 1: Integrated Digital Infrastructure**

The foundational layer requires investment in interoperable digital infrastructure linking existing government financial management systems. Government should establish a Federal Digital Governance Architecture (FDGA) based on open standards, mandating all MDAs to publish financial data via standardized APIs. This architecture should integrate GIFMIS, NOCOPO, the TSA platform, IPPIS, and state-level equivalents under a unified data exchange framework.

The FDGA should be housed in a technically independent agency insulated from political interference, modeled on the Bureau of Public Enterprises' institutional structure. Infrastructure investment must extend to last-mile connectivity for government institutions in underserved states, drawing on universal service funds administered by the NCC. A dedicated government cloud environment, potentially leveraging the Nigerian Communications Satellite (NIGCOMSAT) infrastructure, can address reliability concerns while reducing dependency on foreign cloud providers.

### **6.2 Layer 2: Legal and Regulatory Modernization**

Legal reform is essential to provide a durable basis for digital accountability. Priority legislation includes: (1) an amended Freedom of Information Act with mandatory proactive disclosure requirements and enhanced penalties for non-compliance; (2) a comprehensive Digital Governance Act establishing standards for government data management, open data publication, and algorithmic transparency; and (3) a Beneficial Ownership Registry Act requiring real-time disclosure of ultimate beneficial owners of government contracts, building on the Corporate Affairs Commission's existing database. Regulatory reform should also address the chilling effect of cybercrime legislation on accountability journalism, through clear carve-outs protecting the public interest disclosure of corruption evidence. Nigeria should also ratify and domesticate the African Union Convention on Cyber Security and Personal Data Protection, which provides regional standards for digital governance.



### **6.3 Layer 3: Institutional Capacity Development**

Sustainable digital accountability requires investment in human capital across oversight institutions. A Digital Accountability Capacity Programme (DACP) should be established under the Office of the Accountant-General to provide continuous training in forensic data analysis for auditors, parliamentary staff, and anti-corruption agency investigators. Collaboration with universities and polytechnics to develop public financial management technology curricula can build a pipeline of technically capable civil servants. Capacity development should also extend to civil society organizations, which play a critical intermediary role in translating government data into actionable accountability demands. Grants to data journalism organizations, budget monitoring groups, and civic technology initiatives should be institutionalized through a Governance Innovation Fund, potentially co-financed by the government and international development partners.

### **6.4 Layer 4: Citizen Engagement and Demand-Side Accountability**

The supply of transparent data is necessary but not sufficient for accountability; effective demand-side mechanisms are equally important. Government should invest in public digital literacy programs that enable citizens to access and interpret financial data, leveraging mobile platforms given Nigeria's high smartphone penetration relative to broadband access. Civic technology applications—such as BudgIT's expenditure tracking tools—should be integrated into official government digital platforms to reduce fragmentation of the transparency ecosystem. Participatory budgeting pilots, currently operating in select Nigerian states with support from USAID and the MacArthur Foundation, should be scaled nationally and linked to the open data infrastructure, enabling citizens to trace the implementation of budget commitments they helped define. Formal feedback mechanisms—including a National Accountability Hotline linked to the EFCC and ICPC—should be established to enable citizens to report discrepancies identified through open data analysis.

### **6.5 Layer 5: Political and Institutional Reform**

Ultimately, digital accountability requires political commitment at the highest levels of government. This paper recommends the establishment of a Presidential Digital Accountability Council, chaired by the Vice President and including heads of anti-corruption agencies, the Accountant-General, the Auditor-General, and civil society representatives. The Council should set annual targets for digital transparency benchmarks, publish progress reports, and commission independent evaluations of accountability tool effectiveness. Incentive structures within the civil service should be reformed to reward digital compliance and penalize opacity. Performance contracts for permanent secretaries and accounting officers should include measurable digital accountability metrics. Conversely, non-publication of required financial data or system circumvention should attract administrative sanctions, creating a credible enforcement environment.

## **7. DISCUSSION**

The analysis presented in this paper reveals a paradox central to digital governance reform in Nigeria: the country has made significant investments in digital accountability infrastructure—GIFMIS, NOCOPO, the Open Treasury Portal, and various sector-specific systems—yet the actual accountability outcomes remain far below the potential these tools represent. This gap between digital investment and accountability impact is not primarily technological; it is institutional, political, and social.



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The theoretical framework developed in Section 2 helps explain this paradox. Accountability theory predicts that information asymmetry reduction is necessary but insufficient for accountability without accompanying sanctioning mechanisms. Digital tools can provide data, but data does not automatically translate into consequences for misconduct. The principal-agent framework suggests that what is needed is not just transparency but consequential transparency—disclosure that is systematically linked to enforcement.

The sociotechnical systems lens further illuminates why technically sophisticated tools underperform in Nigeria's governance context. Systems designed for environments with strong data management cultures, reliable infrastructure, and institutionalized compliance norms encounter a context characterized by political resistance, capacity deficits, and infrastructure fragility. Technology adoption without contextual adaptation reproduces what Heeks (2003) calls "design-reality gaps" at scale. The proposed MLDAG framework addresses these challenges by treating digital accountability as a multi-dimensional governance challenge rather than a technical problem. Its five layers explicitly address the technological, legal, human, social, and political dimensions that must be aligned for sustainable accountability transformation. This approach reflects best practice in digital governance reform, drawing on documented lessons from Rwanda's ICT-driven governance transformation, South Korea's OPEN procurement system, and Estonia's digital public services ecosystem.

For Nigeria specifically, the political economy dimension deserves particular emphasis. Reform champions within government—including technocratic officials committed to fiscal discipline and anti-corruption agency leaders—provide leverage points for advancing the MLDAG agenda. International partners, including the World Bank, the IMF, and bilateral donors active in Nigeria's governance sector, can reinforce reform incentives through technical assistance, conditionality on budget support, and reputational capital for reformist officials.

### **8. CONCLUSION AND RECOMMENDATIONS**

This paper has examined the role of digital transformation in strengthening transparency and accountability in Nigerian public institutions. Through analysis of existing digital governance tools, GIFMIS, NOCOPO, the Open Treasury Portal, blockchain pilots, and digital identity systems—the study finds that while Nigeria has made meaningful progress in deploying accountability technologies, structural, institutional, and political barriers significantly limit their transformative impact. The study contributes to governance literature by demonstrating that digital accountability is a multi-dimensional governance challenge requiring integrated solutions across technological, legal, institutional, and social dimensions. It also contributes to Nigerian governance scholarship by providing a systematic assessment of digital accountability tools and an empirically grounded reform framework tailored to Nigeria's specific governance context.



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Based on the analysis, the following recommendations are advanced for policymakers, development partners, and civil society organizations:

1. Accelerate the development and rollout of a Federal Digital Governance Architecture linking existing financial management systems through open, standardized APIs, with mandatory participation by all federal MDAs within a five-year timeline.
2. Prioritize legislative reform to enact a Digital Governance Act, strengthen the Freedom of Information Act, and establish a mandatory beneficial ownership registry integrated with procurement systems.
3. Establish a Digital Accountability Capacity Programme to build technical expertise in audit and oversight institutions, prioritizing forensic data analysis, digital forensics, and open data interpretation.
4. Institutionalize funding for civil society digital accountability initiatives through a Governance Innovation Fund, reducing dependence on volatile donor project cycles.
5. Establish a Presidential Digital Accountability Council with authority to set transparency benchmarks, commission independent evaluations, and recommend accountability sanctions for non-compliance.
6. Extend digital accountability reforms to state and local government levels through conditional fiscal transfers that incentivize adoption of open budget and procurement standards.
7. Commission systematic impact evaluations of existing digital tools using randomized and quasi-experimental designs to generate rigorous evidence on accountability outcomes, contributing to the global knowledge base on digital governance in developing countries.

Future research should investigate the political economy of digital accountability reform in greater depth, including elite bargaining processes around transparency technology adoption and the role of diaspora technology professionals in driving public sector innovation. Comparative studies examining digital accountability outcomes across Nigerian states with varying governance trajectories would also contribute valuable sub-national evidence to the field.

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