



Beyond Stewardship: Generative AI, Institutional Capacity and the Transformation of Offices of the Accountant General for Effective IPSAS Implementation in Africa

Takawira Chirume¹, Sidney Mutusva², Wellington Ngoni Mugwenhi³

¹PhD Candidate, Durban University of Technology, South Africa, IPSAS Implementation Expert, Zimbabwe

²IPSAS expert and Director Finance- Ministry of Local Government and Public Works, Zimbabwe

³IPSAS expert and Director Finance and Administration- Zimbabwe Anti-Corruption Commission, Zimbabwe

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ABSTRACT

Purpose - This paper examines how Offices of the Accountant General (OAGs) in Africa can move beyond traditional stewardship and compliance roles to become strategic institutions that create public value, strengthen institutional resilience and lead responsible digital transformation. It focuses on the interaction between Generative Artificial Intelligence (GenAI), institutional capacity and implementation of International Public Sector Accounting Standards (IPSAS).

Design/methodology/approach - A structured integrative review of 34 academic, theoretical, standards, policy and government sources was undertaken for the period 2015 to 24 August 2026, with older foundational works retained for theory and review design. Transparent search strings, source-type quality appraisal, an extraction matrix and a three-stage Comparative-Argumentative-Synthesis (CAS) procedure were used. Four purposively varied country illustrations - Kenya, Ghana, Rwanda and South Africa - were analysed to connect the framework to documented reform trajectories.

Findings - GenAI can support standards interpretation, disclosure review, reconciliation, exception analysis and professional learning, but it cannot compensate for missing records, fragmented systems, weak expertise or unclear accountability. The country illustrations show that sequencing, integrated systems, professional capacity, asset-data governance and procurement integrity shape readiness. Cybersecurity, privacy, sovereign-data control, regulatory fragmentation, infrastructure constraints, vendor dependence and model assurance are binding implementation conditions. Scale should therefore be conditional on independently evidenced readiness gates and accountable human review.

Originality/value - The paper connects three debates that are often treated separately: IPSAS implementation, public-sector AI adoption and strategic transformation of central accounting institutions. It proposes a phased, Africa-sensitive framework in which foundational capacity and responsible AI governance convert accounting reform into accountability, resilience and public value.

Keywords: Office of the Accountant General; Generative AI; IPSAS; institutional capacity; public value; Africa; digital transformation; accountability

INTRODUCTION

African governments face an increasingly demanding public financial management environment. Debt pressures, climate-related shocks, expanding service expectations, complex public-private arrangements and



demands for real-time transparency require more than accurate bookkeeping. They require institutions capable of converting financial information into strategic insight, credible accountability and timely policy action. The

Office of the Accountant General has traditionally occupied the centre of government accounting through treasury control, compilation of financial statements, maintenance of accounting instructions and stewardship of public resources. Those functions remain indispensable. The central argument of this paper, however, is that they are no longer sufficient. The contemporary OAG must also operate as a strategic institution that shapes information architecture, develops professional capability, supports fiscal resilience, coordinates reforming actors and uses emerging technologies to generate public value.

The urgency of this transition is reinforced by the uneven global movement from cash to accrual reporting. The International Public Sector Financial Accountability Index reports that only 31 per cent of the 169 jurisdictions covered were reporting on an accrual basis in 2024, while 39 per cent remained on partial accrual and 30 per cent on cash. Among accrual-reporting jurisdictions, 66 per cent used IPSAS directly, through local modification or as a reference point. The same report revised down earlier expectations for the pace of reform and identified political and organisational support, technical difficulties, inadequate funding and reform fatigue as persistent obstacles (IFAC, CIPFA & IPSASB 2025). These findings are particularly relevant to African states, where ambitious adoption declarations often coexist with shortages of qualified personnel, incomplete asset registers, fragmented information systems and constrained implementation budgets.

IPSAS implementation is therefore not a discrete accounting project. It is an institution-wide transformation involving legislation, chart-of-accounts redesign, asset and liability recognition, consolidation boundaries, financial management information systems, audit arrangements, training, change management and use of information by decision makers. Recent reviews of emerging economies show that accrual reforms are frequently driven by coercive or mimetic pressures and may not automatically improve domestic management practice (Salato, Gomes & Ferreira 2024). Other studies identify education, continuous professional development and socio-material alignment between people and systems as central to reform success (Schuler, Grossi & Fuchs 2023). The distinction between formal adoption and substantive implementation is consequently fundamental: governments may announce IPSAS compliance while underlying routines, records and decisions remain predominantly cash oriented.

Generative AI adds a new dimension to this reform agenda. Unlike earlier automation that primarily executed predefined rules, GenAI can create text, code, summaries, classifications and analytical explanations in response to natural-language prompts. In an OAG environment, such tools could help accountants navigate complex standards, draft accounting policies, identify disclosure gaps, translate technical requirements into operational guidance, analyse large data sets and design targeted training. Public-sector AI scholarship nevertheless cautions that benefits depend on organisational readiness, data quality, institutional governance and absorptive capacity (Madan & Ashok 2023; Zuiderwijk, Chen & Salem 2021). GenAI also introduces risks of inaccurate outputs, fabricated references, confidentiality breaches, opaque reasoning, automation bias and weakened professional judgement. These risks are magnified where public financial data are incomplete or systems are poorly governed.

Africa's policy environment recognises both the opportunity and the asymmetry. The African Union's Continental Artificial Intelligence Strategy promotes an Africa-centred, development-oriented and inclusive approach built around capability development, risk management, investment and cooperation. It explicitly acknowledges disparities in electricity, broadband, computing infrastructure, data legislation, skills and AI readiness, and calls for context-specific capacity building and multistakeholder implementation (African Union 2024). Similarly, the World Bank's GovTech Maturity Index identifies core government systems, digital services, citizen engagement and enabling institutions as interdependent components of public-sector digital maturity, while reporting that Africa continues to lag other regions (World Bank 2025). GenAI adoption in public finance must therefore be located within a wider institutional and digital transformation programme rather than treated as a stand-alone software purchase.

Existing literature has not sufficiently integrated the strategic role of the OAG, the capacity conditions for IPSAS implementation and the governance of GenAI in African public financial management. IPSAS studies



often concentrate on adoption determinants and reporting outcomes; AI studies frequently focus on service delivery or audit applications; and public-value scholarship rarely places the central government accounting institution at the centre of digital reform. This paper addresses that fragmentation. Its objective is to develop an integrated explanation of how OAGs can combine human capital, stakeholder collaboration, responsible GenAI and organisational learning to achieve substantive IPSAS implementation and wider public value. The paper contributes by applying institutional theory, dynamic capabilities and public value theory through a Comparative-Argumentative-Synthesis approach and by proposing a phased strategic transformation framework for African contexts.

CONCEPTUAL AND INSTITUTIONAL BACKGROUND

The stewardship role of the OAG is grounded in a legitimate concern: public resources must be authorised, recorded, safeguarded and reported in accordance with law. Stewardship provides the control environment from which accountability begins. Yet stewardship can become administratively narrow when success is defined primarily by transaction processing, year-end reporting and formal compliance. Public value theory shifts attention from internal production to the value government creates for citizens through legitimate, capable and outcome-oriented institutions (Moore 1995). Applied to the OAG, public value is created when reliable financial information improves resource allocation, exposes fiscal risk, supports service continuity, strengthens legislative oversight and enhances public trust. The strategic OAG does not abandon control; it uses control-quality information to influence decisions and long-term state capability.

This wider mandate changes the meaning of IPSAS implementation. Accrual information can reveal infrastructure deterioration, pension obligations, arrears, contingent liabilities, non-exchange revenue, public-sector combinations and the full cost of services. The 2025 international accountability index links accrual reporting to transparency, informed decision making, accountability and intergenerational equity (IFAC, CIPFA & IPSASB 2025). Nevertheless, those benefits are not automatic. If accrual statements are produced late, poorly understood or disconnected from budgets and management systems, they become ceremonial artefacts. Ben Slama and Jandoubi (2024) associate IPSAS adoption with improved transparency and accountability across developing-country settings, but the broader implementation literature shows that complementary legal, administrative and professional capacities condition outcomes. IPSAS is thus an information infrastructure whose value depends on how institutions produce, validate, interpret and use it.

The capacity concept in this paper operates at three levels. At the individual level, it includes technical accounting knowledge, digital literacy, ethical judgement, analytical skills and change competence. At the organisational level, it includes leadership, staffing models, funding, process design, data governance, technology architecture, internal controls and knowledge management. At the enabling environment level, it includes legislation, political and administrative support, professional institutions, audit relationships, education systems and cross-government coordination. Weaknesses at any level can undermine others. Highly trained accountants cannot generate reliable, consolidated statements without complete entity data; advanced systems cannot compensate for unclear reporting boundaries; and strong standards cannot create public value if decision makers ignore the resulting information.

GenAI should be understood as an augmenting general-purpose capability rather than an autonomous accountant. Public-sector AI research identifies applications in internal management, policy analysis, service delivery, risk assessment and citizen interaction, while also emphasising legal, ethical and organisational challenges (de Sousa et al. 2019; Wirtz, Weyerer & Geyer 2019). Accounting research similarly finds that smart technologies reshape tasks, knowledge requirements and professional roles (Mancini, Lombardi & Tavana 2021). In the OAG, GenAI can assist with knowledge-intensive work, but formal accountability for public financial statements, interpretations and controls must remain with authorised officials. The strategic question is therefore not whether AI replaces accountants, but how the OAG designs accountable human-AI collaboration.



THEORETICAL FRAMEWORK

Institutional theory explains why governments adopt globally legitimate reforms and why formal structures may become disconnected from practice. Coercive pressures may arise from legislation, lenders or development partners; normative pressures arise from professional bodies and standard setters; and mimetic pressures encourage jurisdictions to imitate perceived leaders. These forces can accelerate IPSAS adoption and digital modernisation, but they can also produce symbolic compliance when implementation capacity is weak. The literature on emerging-economy accrual reforms reports precisely this tension: international legitimacy may be achieved through formal adoption while domestic routines remain unchanged (Salato, Gomes & Ferreira 2024). For the OAG, institutional theory predicts that mandates and external pressure are necessary but insufficient. Reform becomes substantive when reporting rules are embedded in budgets, systems, incentives, skills and daily decisions.

Dynamic capabilities theory explains how an OAG can move from possessing resources to repeatedly adapting them. Dynamic capabilities involve sensing changes and risks, seizing opportunities and reconfiguring organisational assets and routines (Teece 2007). In this setting, sensing includes monitoring new IPSAS pronouncements, fiscal vulnerabilities, data-quality problems and relevant AI developments. Seizing includes selecting priority use cases, mobilising resources and establishing partnerships. Reconfiguring includes redesigning roles, integrating systems, updating controls, creating knowledge repositories and embedding continuous professional development. This perspective is important because IPSAS and GenAI are moving targets: standards evolve, technology changes rapidly and institutional risks emerge through use.

Public value theory supplies the outcome criterion. A reform should not be judged only by adoption, system deployment or the number of staff trained. It should be judged by whether it improves transparency, accountability, fiscal resilience, decision quality, service sustainability and trust. This guards against both accounting formalism and technological solutionism. The same GenAI tool may create public value when it helps identify liabilities and improve disclosure but destroys value when it leaks confidential data or generates unverified accounting advice. Public value therefore depends on three forms of alignment: operational capacity, authorising legitimacy and socially valuable outcomes.

Integrating the theories yields causal logic. Institutional conditions shape the pressure and authority for reform; foundational resources provide potential capacity; dynamic capabilities convert resources into new routines and strategic functions; and public value provides the ultimate test of success. Stakeholder engagement and responsible AI governance connect these stages. The integrated framework predicts that GenAI will strengthen IPSAS implementation only when it is embedded within capable institutions, validated by professionals, supported by reliable data and directed towards clearly defined public outcomes.

METHODOLOGY

Review design and scope

The study adopted a structured integrative review because the research question crosses public-sector accounting, institutional transformation, digital government and AI governance. Integrative reviews permit the combination of empirical studies, conceptual work, standards and policy documents where the purpose is theory development rather than estimation of a pooled effect (Torraco 2016; Snyder 2019). The guiding question was: under what institutional, professional, technological and governance conditions can African Offices of the Accountant General use GenAI to strengthen substantive IPSAS implementation and public value? The principal review window was January 2015 to 24 August 2026. Older works were retained only where they supplied the theoretical foundations for public value, institutional theory, dynamic capabilities or integrative-review design.

Search sources and search strategy

Academic evidence was identified through structured keyword searches of Google Scholar and Crossref-linked publisher pages, followed by backward and forward citation checking of high-relevance articles. Grey



literature was searched in the repositories of the African Union, IPSASB, IFAC, CIPFA, the World Bank, national treasuries, public-sector accounting standards boards and accountant-general institutions. Searches were updated on 24 August 2026.

Eligibility, selection and quality appraisal

A source was included when it addressed at least one of five domains: IPSAS or accrual implementation capacity; the mandate and transformation of central accounting institutions; public-sector AI adoption or governance; digital public-finance systems; or public-value outcomes. Eligible sources had to provide a discernible argument, method, institutional mandate or documented reform experience and be available in English. Duplicates, vendor marketing, unsupported opinion, news reports without primary documentation, purely technical model studies without organisational relevance and private-sector-only applications were excluded. Country illustrations were purposively selected for maximum variation: a nationally sequenced transition (Kenya), a CAGD-led IPSAS and GIFMIS programme with asset-data challenges (Ghana), an integrated PFM and professional-capacity trajectory (Rwanda), and a cautionary IFMS governance case (South Africa).

Quality was assessed by source type rather than through a single scale. Peer-reviewed work was appraised for methodological clarity, relevance, transparency of evidence and transferability to public institutions. Official documents were assessed for issuing authority, mandate, date, traceability of claims and proximity to the reform being described. Primary government documents were preferred for country facts; comparative and scholarly sources were used to interpret mechanisms and limitations. Evidence was weighted rather than mechanically counted, and no claim of actual GenAI effectiveness was made where only readiness or adjacent digital reform was documented. The final analytic corpus comprised 34 sources represented in the reference list: 19 academic or foundational works and 15 standards, policy, strategy or government documents.

Evidence extraction and CAS analytical procedure

Each source was entered into an extraction matrix recording year, geography, institutional level, reform stage, capacity constraint, enabling mechanism, public-value outcome, AI relevance, evidence type and stated limitations. CAS was then applied in three explicit stages. First, the comparative stage organised evidence around four contrasts: stewardship-centred versus strategic OAGs; formal adoption versus substantive IPSAS use; augmentation versus substitution of professional judgement; and centralised control versus stakeholder co-production. Second, the argumentative stage reconstructed each material claim as claim-evidence-warrant-counterevidence, testing whether outcomes attributed to standards or technology could instead be explained by skills, data, leadership, law, funding or system integration. Third, the synthesis stage mapped recurring mechanisms to institutional theory, dynamic capabilities and public value theory, compared them with the four country illustrations and converted only convergent relationships into the framework, readiness gates and propositions. Extraction and coding were repeated in a second pass, and factual country claims were checked against primary institutional documents to reduce interpretive drift.

Methodological boundaries

The method supports analytical transfer rather than statistical generalisation. Public documents may emphasise planned progress and under-report implementation failure; English-language selection can omit Francophone, Lusophone and Arabic evidence; and published GenAI use within African OAGs remains too limited for causal inference. The cases are therefore illustrations of institutional readiness and reform mechanisms, not evaluations of GenAI impact. These limitations are handled through primary-source triangulation, explicit separation of documented practice from proposed use, and a research agenda requiring country diagnostics, fieldwork and controlled pilots.



COMPARATIVE-ARGUMENTATIVE SYNTHESIS

From stewardship-centred administration to strategic public value

The central comparison is not between control and innovation, but between a narrow and an expanded understanding of control. A stewardship-centred OAG typically emphasises transaction legality, circulars, ledger integrity and production of annual accounts. A strategic OAG retains these functions but links them to

risk intelligence, policy advice, system architecture, professional development and stakeholder accountability. The former is often reactive and year-end oriented; the latter seeks continuous, decision-useful information. The distinction is summarised in Table 1.

Table 1: Comparative evolution of the Office of the Accountant General

Dimension	Stewardship-centred OAG	Transitioning OAG	Strategic public-value OAG
Core orientation	Compliance, custody and transaction control	Accrual conversion and system modernisation	Financial intelligence, resilience, accountability and value creation
Time horizon	Year-end and retrospective	Project milestones and transition dates	Continuous, forward-looking and risk-based
Information model	Cash and ledger-centred	Hybrid cash-accrual with developing registers	Integrated accrual, budget, asset, debt, procurement and performance information
Human capital	Accounting-rule knowledge	IPSAS training and implementation teams	Multidisciplinary capability, continuous learning and research partnerships
Technology role	Transaction processing	FMIS upgrade and digitisation	Interoperable platforms, analytics and governed human-AI collaboration
Stakeholder model	Instruction and compliance	Consultation during reform	Co-production with ministries, auditors, professions, academia, ICT agencies and users
Success measure	Accounts produced and rules followed	Standards adopted and systems deployed	Information used, risks managed, audit quality improved and public value demonstrated

The strategic model is better suited to accrual accounting because IPSAS generates information that crosses administrative boundaries. Consolidation requires coordinated entity reporting; asset accounting requires engineers and valuers; employee benefits require actuarial inputs; financial instruments require debt-management data; and sustainability-related reporting increasingly requires non-financial information. IPSASB's 2024-2028 strategy explicitly connects accrual IPSAS, public financial management and sustainable development (IPSASB 2024). An OAG that remains confined to ledger administration cannot coordinate these information dependencies. Strategic leadership is therefore a functional requirement of the standards, not an optional managerial aspiration.

The capacity paradox in IPSAS implementation

Literature converges on a capacity paradox. Jurisdictions adopt sophisticated standards partly to strengthen institutions, yet implementation demands the very institutional capabilities that are often weakest. Liberato, Paiva and Serrasqueiro (2024) identify training, systems, financial resources, political support, organisational culture and legal arrangements among the recurring constraints and stimuli in public accounting reform. Schuler, Grossi and Fuchs (2023) add that education should not be treated as a one-off pre-implementation activity; continuous professional development must be embedded in the socio-material system of reform. This matters in Africa, where professional-accounting capacity may be concentrated in capitals or central ministries while line ministries and subnational entities have limited access to specialist support.

Human-capital gaps are not restricted to knowledge of individual standards. Effective implementation requires project management, data modelling, systems analysis, valuation, consolidation, change leadership and the ability to communicate financial information to non-accountants. Staff turnover can dissipate training investments, while consultant-dependent implementation can create documents without durable institutional memory. The OAG must therefore shift from episodic workshops to capability systems: competency frameworks, accredited learning pathways, mentoring, communities of practice, technical help desks and repositories of approved interpretations. Partnerships with universities and professional bodies can expand the pipeline while research collaboration can test whether training changes practice.

Digital and data capacity is equally important. The World Bank's GovTech framework treats financial management information systems, interoperability, government cloud, human-resource systems, procurement, debt management and digital skills as connected elements of maturity (World Bank 2025). IPSAS implementation often exposes weaknesses hidden by cash accounting: duplicate asset records, inconsistent entity codes, incomplete contract data, unrecorded liabilities and incompatible charts of accounts. GenAI cannot reliably infer missing facts. Where source data is poor, it can produce fluent but misleading outputs, making the traditional 'garbage in, garbage out' problem more dangerous because errors appear persuasive.

Leadership and funding complete the capacity triangle. Accrual reform competes with immediate service pressures, and its benefits may materialise over several budget cycles. The international index's downward revision of accrual projections illustrates how operational shocks, insufficient funding and reform fatigue delay transition (IFAC, CIPFA & IPSASB 2025). A strategic OAG requires a multi-year implementation mandate, protected reform resources, clear accountability and credible milestones. It should report not only whether standards have been adopted, but whether opening balances are validated, systems are integrated, staff are competent, audits are improving and managers use accrual information.

GenAI opportunities across the IPSAS implementation cycle

GenAI offers greatest value where work is text-intensive, repetitive but judgement-supported, and capable of independent verification. During policy development, a secure model can compare draft accounting manuals with IPSAS requirements, generate first drafts of technical guidance and map changes between editions of standards. During implementation, it can produce entity-specific checklists, explain recognition and disclosure requirements in accessible language, create training scenarios and answer routine queries using an approved knowledge base. During reporting, it can support narrative consistency, search for missing disclosures, classify transactions for review, reconcile explanatory schedules and summarise exceptions. During audit preparation, it can organise evidence requests, identify unusual patterns and trace cross-references, if outputs are validated.

The strongest case for GenAI is augmentation of scarce expertise. Natural-language interfaces may allow accountants in geographically dispersed entities to access approved IPSAS guidance without waiting for a small central technical team. Personalised learning can diagnose knowledge gaps and generate practice cases. Translation and simplification can improve stakeholder understanding. Scenario tools can help officials examine the long-term effects of lease decisions, guarantees, asset maintenance or employee-benefit obligations. These uses align with research showing that AI adoption can support internal management and public value when organisational and environmental readiness are present (Madan & Ashok 2023; Selten & Klievink 2024).



Yet the argument that GenAI can 'close' the capacity gap is only partially valid. It can distribute knowledge and accelerate tasks, but it cannot establish the legal ownership of assets, resolve contested consolidation boundaries, supply absent source documents or exercise accountable professional judgement. It may also deepen inequality if better-resourced institutions gain advanced tools while weaker entities lack connectivity and clean data. The AU strategy's emphasis on capability disparities and context-sensitive implementation is therefore directly relevant (African Union 2024). GenAI should be treated as a capacity multiplier: it amplifies strong data, governance and expertise, but can also amplify weak controls and misinformation.

Professional judgement, cybersecurity, data governance and regulatory accountability

Public-sector accounting contains estimates, interpretations and choices with distributional consequences. Asset useful lives, impairment assumptions, provisions, control assessments and materiality judgements cannot be delegated to an opaque model. Research on AI in auditing identifies bias, privacy, transparency, accountability and erosion of professional scepticism as material concerns, while broader GenAI scholarship adds hallucination, intellectual-property and security risks (Munoko, Brown-Liburd & Vasarhelyi 2020; Dwivedi et al. 2023). In government, a confident but unsupported output can affect debt, budgets, payroll, procurement or consolidated accounts. The authorised official must therefore remain accountable for the evidence, judgement and sign-off, irrespective of who supplies the model.

Cybersecurity risk is not confined to an external breach. Prompt injection can manipulate retrieval systems; uploaded documents can carry malicious instructions; model interfaces can expose credentials or confidential attachments; plug-ins and vendor updates create supply-chain risk; and extensive prompt logs may become a new repository of sensitive fiscal data. An OAG should treat any model connected to IFMIS, payroll, debt, procurement or asset systems as part of the financial-control environment. Threat modelling, network segmentation, role-based access, multifactor authentication, encryption, security testing, incident response, immutable logging and business-continuity arrangements are prerequisites, not post-pilot enhancements (African Union 2024; World Bank 2020).

Data privacy and governance create a separate set of obligations. Public financial information can include personal identifiers, bank details, supplier records, tax information, salaries, social-benefit data, investigations and market-sensitive debt plans. Before processing, the OAG needs a lawful purpose, data classification, minimisation rules, retention schedules, approved hosting location, cross-border transfer assessment and a clear allocation of controller, processor and model-provider responsibilities. Retrieval-augmented generation should use version-controlled, authorised repositories with document-level permissions and source citations. The AU Data Policy Framework calls for trustworthy, harmonised data governance while protecting rights and enabling responsible value creation (African Union 2022). This means that data sovereignty cannot be reduced to server location; it includes enforceable control over access, reuse, deletion, audit and model training.

Regulatory readiness is uneven across the continent. AI-specific rules remain emergent, while data-protection, cybersecurity, public procurement, archives, access-to-information, evidence and public-finance laws differ in coverage and enforcement. A legally compliant procurement at contract award can still create later non-compliance if a provider reuses prompts for training, changes model versions without notice, stores logs outside the permitted jurisdiction or cannot produce audit evidence. The OAG should therefore maintain a legal-obligations register and require contracts to address data ownership, secondary use, sub-processors, model changes, explainability, audit access, breach notification, portability, service continuity, intellectual property and termination assistance (African Union 2022, 2024).

Infrastructure limitations also shape what is feasible. The AU strategy identifies disparities in electricity, broadband, computing capacity, skills and AI readiness, while ITU reported that only 38% of Africa's population used the internet in 2024 (African Union 2024; ITU 2024). The population indicator does not measure government connectivity directly, but it signals the wider constraints facing geographically dispersed entities. Unstable power, low bandwidth, costly cloud access, legacy applications, limited secure hosting, scarce cybersecurity staff and foreign-currency exposure can turn an apparently inexpensive pilot into an unsustainable recurrent obligation. Offline-capable workflows, lightweight models, asynchronous processing,



local fallback procedures and total-cost-of-ownership analysis may therefore create more public value than a technically ambitious design.

Responsible adoption requires a risk-tiered human-in-the-loop model. Low-risk uses may summarise public guidance or generate training questions; medium-risk uses may flag disclosure gaps in non-sensitive drafts; high-risk uses include transaction classification, anomaly detection on confidential data and recommendations affecting recognition or measurement. Prohibited uses should include autonomous posting, unsupported creation of evidence, final accounting-policy interpretation, unsupervised access to production credentials and decisions with legal or distributional effects. Every approved use case should specify its owner, data class, authorised environment, reviewer competence, accuracy threshold, evidence requirements, logging, appeal or correction route and stop conditions. These controls translate UNESCO, OECD and AU principles into the operational language of financial reporting (OECD 2019; UNESCO 2021; African Union 2024).

Stakeholder engagement and practitioner-researcher collaboration

IPSAS implementation is commonly framed as the responsibility of accountants, but the reporting system depends on a wider network. Budget departments influence whether accrual information informs appropriations; ICT agencies control infrastructure; auditors shape assurance expectations; professional bodies develop competence; universities educate future staff; line ministries hold source data; parliaments and civil society use reports; and development partners provide finance and technical assistance. Fragmented reforms produce duplicated training, incompatible systems and conflicting guidance. The OAG's strategic role is to convene these actors around a shared architecture, implementation sequence and accountability framework.

Practitioner-researcher collaboration is particularly underdeveloped. Universities often study reform after implementation decisions are made, while OAGs may lack dedicated research and evaluation capacity. A more productive model is co-production: practitioners identify priority problems and provide institutional access; researchers design diagnostics, test interventions and evaluate outcomes; and professional bodies translate results into standards, curricula and continuing development. Such collaboration can generate evidence on whether GenAI improves disclosure quality, reduces reporting time, changes professional judgement or creates new risks. It can also prevent technology policy from being driven primarily by vendors and anecdote.

The synthesis is that stakeholder engagement is not a communications add-on. It is a production mechanism for reliable public financial information and a legitimacy mechanism for reform. Without it, the OAG may issue technically sound instructions that entities cannot implement or reports that users cannot interpret. With it, the OAG becomes a knowledge broker linking standards, systems, professions, policy and public accountability.

Illustrative African reform trajectories

The reviewer's call for practical illustration is addressed through four purposively varied country cases. They do not claim that African OAGs have already institutionalised GenAI. Instead, they show the institutional assets and failure modes on which responsible adoption would depend: sequencing and central coordination, asset and transaction data, integrated PFM systems, professional capability, procurement integrity and sustained implementation governance. Table 2 distinguishes documented reform evidence from the GenAI implications inferred through CAS.

Table 2: Illustrative African reform trajectories and implications for governed GenAI

Country	Documented reform trajectory	Institutional lesson	Implication for GenAI
Kenya	PSASB prescribed IPSAS/IFRS in 2014, piloted cash-to-accrual transition guidance in 2023 and moved to a national, phased accrual roadmap from July 2024 to June 2027 (Kenya PSASB	Transition depends on sequenced recognition of assets and liabilities, entity project teams, standard	Begin with approved-guidance search, training and disclosure checks. Do not automate valuation, opening



	2023; Kenya National Treasury 2024).	templates, training and central coordination rather than a declaration alone.	balances or consolidation judgements before records and accountability are validated.
Ghana	CAGD established an accrual-IPSAS implementation programme linked to GIFMIS, while the Ministry of Finance identified the absence of a central, comprehensive state-asset inventory as a material coordination problem (CAGD Ghana 2024; Ghana Ministry of Finance 2022).	Digital financial reporting and IPSAS capability must be connected to asset governance, chart-of-accounts design, entity compliance and durable professional capacity.	GenAI may flag gaps and support reconciliations, but it must never infer missing assets or manufacture evidence. Asset-data remediation remains a human and institutional task.
Rwanda	The PFM Strategy 2024-2029 reports broad IFMIS integration, electronic reporting by most budget and non-budget agencies, 1,052 professionally certified staff, 92% unqualified financial-statement opinions and an IPSAS accrual project reported as 73% progressed by June 2024 (MINECOFIN 2024).	Integrated systems, professionalisation, measurable outcomes and reform governance create a stronger platform, although analytics gaps, staff retention and transition risk remain.	A controlled analytics or knowledge-assistant pilot is more plausible, but it should still use approved repositories, role-based access, accuracy benchmarks, audit logs and independent assurance.
South Africa	The long-running IFMS programme demonstrates the risk side of digital transformation. In 2025 Parliament welcomed an expanded SIU investigation and noted that manual processes persisted across financial, human-resource and supply-chain functions (Parliament of South Africa 2025).	Procurement integrity, ownership, interoperability and implementation governance can be more decisive than the sophistication of the selected technology.	GenAI procurement should require business cases, transparent vendor evaluation, security and data-location clauses, portability, staged acceptance testing and clear exit rights.

Across the cases, the mechanism is consistent even though the reform stages differ. Kenya shows the value of a time-bound transition architecture; Ghana shows that a reporting programme cannot outrun asset and systems governance; Rwanda shows how integrated systems, professional certification and measurable outcomes can create stronger absorptive capacity; and South Africa shows that large technology investment can be neutralised by fragmented accountability and procurement failure. The inference is not that one country supplies a ready-made model. It is that GenAI readiness is path-dependent and must be diagnosed against each jurisdiction's accounting stage, information architecture, professional capacity, regulatory environment and implementation history.

A STRATEGIC TRANSFORMATION FRAMEWORK FOR AFRICAN OAGS

Figure 1 integrates the review into a strategic transformation framework. Foundational capabilities - human capital, data and digital infrastructure, leadership resources, and AI governance - feed dynamic-capability processes of sensing, seizing and reconfiguring. Those processes enable four strategic OAG functions: IPSAS policy and implementation leadership; analytics and decision support; capacity and knowledge leadership; and

assurance and compliance intelligence. Stakeholder collaboration, responsible GenAI controls and institutional conditions operate as cross-cutting enablers. The intended outcomes are substantive IPSAS implementation, accountability, resilience, better resource allocation and trust. Monitoring, evaluation and learning create a feedback loop so that reform adapts to evidence.

Operationalizing the Strategic Transformation Framework for African OAGs

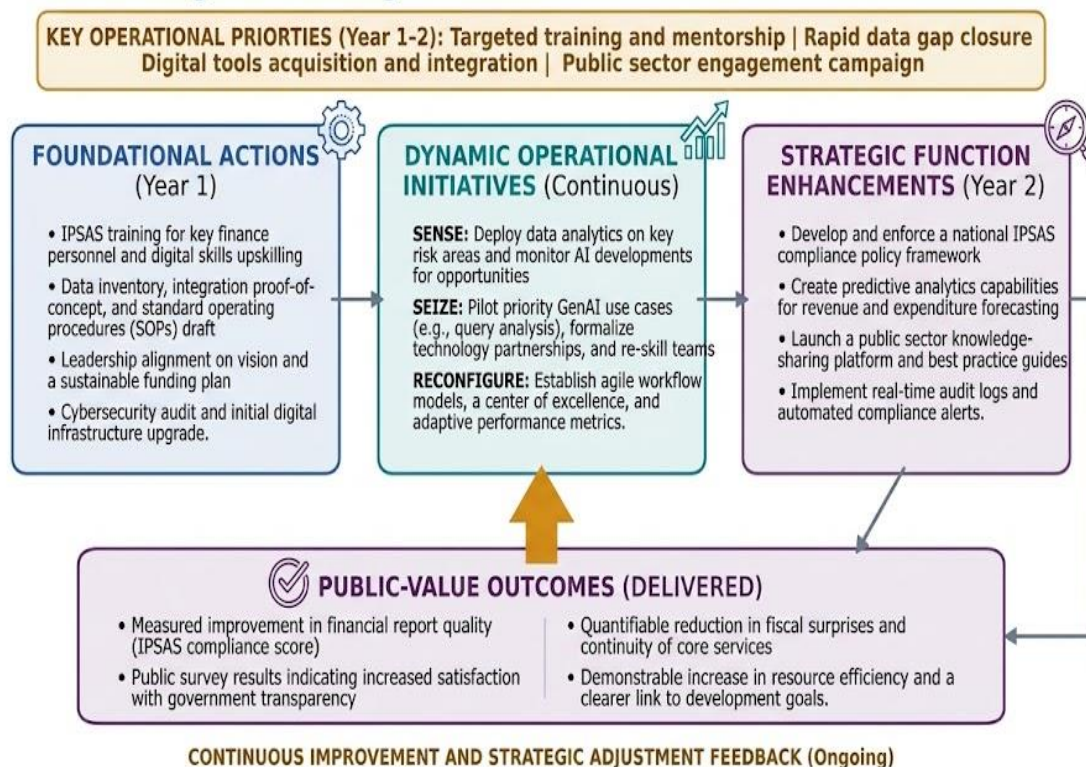


Figure 1: Strategic transformation framework for Offices of the Accountant General

Six propositions follow. First, institutional capacity has a stronger effect on substantive IPSAS implementation than formal adoption alone. Second, GenAI improves IPSAS implementation only when data quality, professional oversight and governance controls exceed minimum thresholds; below those thresholds, apparent efficiency may conceal greater reporting risk. Third, dynamic capabilities mediate the relationship between resources and outcomes: possessing technology or qualified staff is insufficient unless the OAG can reconfigure routines and scale learning. Fourth, stakeholder and practitioner-researcher collaboration strengthens both implementation quality and public use of financial information. Fifth, public value is maximised when accrual information and AI-supported analysis influence budgeting, risk management, service decisions and external accountability rather than remaining confined to year-end reporting. Sixth, scale should be conditional: an OAG should not move a use case from experimentation to production until cybersecurity, privacy, legal, infrastructure and vendor-dependence readiness gates have been independently evidenced.

Implementation should proceed in three phases. Phase one is foundation and diagnosis. The OAG should map IPSAS competencies, data assets, system interfaces, legal obligations, stakeholder roles and AI risks; classify use cases by sensitivity; and verify that accounting manuals and knowledge sources are current. The baseline should include data-quality profiling, a privacy-impact assessment, threat model, connectivity and power assessment, business-continuity plan, vendor-market scan and total-cost estimate. Priority at this stage is not procurement but evidence of readiness: named accountability, records management, cybersecurity, approved data architecture and professional standards.



Phase two is controlled experimentation. Low-risk uses may summarise approved guidance, generate training questions, draft non-authoritative checklists and test internal consistency in public documents. Pilot protocols should specify baselines, expected benefits, accuracy thresholds, validation sampling, red-team tests, authorised users, incident escalation and stop conditions. Multidisciplinary teams should include accountants, ICT and cybersecurity professionals, internal auditors, legal advisers, data-protection officers, procurement specialists and researchers. Evaluation should examine error severity, source traceability, time saved, user behaviour, bias, privacy and security events, operating cost and whether professional judgement improves or deteriorates.

Phase three is institutionalisation and scale. Only pilots that meet the readiness gates should enter secure government environments, authorised knowledge bases and standard operating procedures. Scaling should include role redesign, continuing professional development, model and data version control, help-desk support, audit trails, resilience testing, portability arrangements, model monitoring and independent assurance. Contracts should preserve audit access and an exit path if cost, law, performance or sovereignty conditions change. The OAG should publish an annual digital-accountability statement describing approved AI uses, controls, material incidents, performance, corrective action and lessons. This would model the transparency expected from other institutions and strengthen legitimacy.

Table 3 translates the framework into a capacity-risk-response matrix. Its key message is that GenAI has a bounded contribution. Human-capital gaps may be reduced through guided learning but not eliminated; missing records require remediation; fragmented systems require interoperability; security, privacy and legal gaps require enforceable controls; infrastructure constraints require resilient design; and stakeholder fragmentation requires institutional coordination. The strategic OAG must decide not only where AI can be used, but where it should not be used until readiness evidence exists.

Table 3: Capacity and implementation barriers, potential GenAI contributions and readiness safeguards

Capacity gap	Effect on IPSAS implementation	Potential GenAI contribution	Required boundary or safeguard
Limited IPSAS expertise	Inconsistent recognition, measurement and disclosure	Approved knowledge assistant; personalised learning; draft checklists	Authoritative source retrieval; expert validation; competency assessment
Poor data quality and incomplete records	Unreliable balances, registers and consolidation	Exception detection; reconciliation support; classification for review	No invention of missing facts; data remediation; documented evidence
Fragmented legacy systems	Manual interfaces, duplication and delayed reporting	Mapping and documentation assistance; code generation in controlled environments	Enterprise architecture, testing, cybersecurity and change control
Weak governance and unclear accountability	Ceremonial compliance and inconsistent decisions	Workflow prompts; policy drafting; audit-trail support	Named accountable officials; human sign-off; legal and ethical policy



Limited funding and reform fatigue	Interrupted projects and loss of skills	Automation of selected low-risk tasks; scalable training	Prioritised portfolio, total-cost analysis and sustainable support
Stakeholder fragmentation	Conflicting guidance, duplicated systems and low use of reports	Knowledge portals; consultation synthesis; issue tracking	Formal coordination structures and inclusive participation
Weak research and evaluation	Technology and training adopted without evidence of impact	Rapid literature synthesis; coding support; evaluation documentation	Independent methods, transparent data and reproducible assessment
Cybersecurity exposure	Prompt manipulation, credential theft, data exfiltration, supply-chain compromise or disruption of financial operations	Security-event triage; controlled documentation and code assistance	Threat model; segmented environment; access control; encryption; red-team testing; incident response; immutable logs
Privacy and sovereign-data risk	Unlawful processing, cross-border exposure, secondary use or retention of payroll, supplier, tax or beneficiary information	Automated redaction suggestions; metadata and retention checks	Lawful purpose; minimisation; privacy-impact assessment; approved hosting; contractual deletion; no provider training on government data
Regulatory and procurement unreadiness	Unclear accountability, unauditable model changes, vendor lock-in and conflict with records, evidence or public-finance duties	Obligations mapping and contract-clause comparison for expert review	Legal register; transparent business case; audit rights; change notice; portability; sub-processor disclosure; termination assistance
Infrastructure and continuity constraints	Unstable power, low bandwidth, limited secure compute, recurrent foreign-currency cost and exclusion of remote entities	Lightweight or asynchronous assistance; offline training packages	Connectivity and power baseline; fallback procedures; capacity planning; total-cost analysis; resilient architecture and support model
Weak model assurance	Hallucination, bias, version drift, opaque sources and automation bias contaminate reports or professional judgement	Source-linked drafting, disclosure checks and exception ranking	Authoritative retrieval; benchmark set; severity-weighted accuracy threshold; human sign-off; version register; independent assurance

DISCUSSION AND IMPLICATIONS

Theoretical contribution and evidence boundaries

The paper's principal theoretical contribution is to reposition the OAG as the organisational bridge between institutional pressure, digital capability and public value. Institutional theory explains why IPSAS and AI may be adopted symbolically; dynamic capabilities explain how adoption becomes embedded practice; and public value theory prevents implementation success from being reduced to technical compliance. Together, the theories show that the OAG's transformation is neither purely professional nor technological. It is a change in how the state organises financial knowledge and uses it to govern.



Policy and implementation implications

The country illustrations refine the framework by showing that readiness is cumulative but non-linear. Rwanda's integration, certification and audit indicators create a different starting point from a jurisdiction still constructing asset registers or stabilising an IFMIS. Kenya's staged roadmap illustrates how sequencing can make progress observable, while the South African experience shows why a sophisticated procurement cannot substitute for accountable ownership and execution. National diagnostics should therefore set jurisdiction-specific thresholds and should allow a finding of 'not yet ready' for high-risk uses without treating that conclusion as resistance to innovation.

For policy, the implication is that national IPSAS strategies should include an explicit OAG institutional-development component. Reform plans should budget for competency systems, data remediation, interoperability, research, stakeholder coordination and change management, not only software and consultancy. Implementation milestones should distinguish adoption, transition and sustained use. Governments and development partners should avoid imposing uniform AI solutions across jurisdictions with different infrastructure, legal frameworks and professional capacity. The AU's context-sensitive approach provides a suitable continental principle: common governance standards should coexist with locally sequenced implementation.

For OAG leadership, the immediate task is portfolio discipline. GenAI enthusiasm can produce dispersed pilots, shadow use of public tools, uncontrolled data processing and vendor dependence. A central register of use cases, risk classifications, legal bases, datasets, models and accountable owners is essential. High-value, low-risk applications should be prioritised, while material accounting judgements and confidential data require stronger controls and independent assurance. Human-capital investment should emphasise hybrid competence: IPSAS expertise, data literacy, security awareness, prompt and model evaluation, ethics, communication and professional scepticism. The most effective accountant will not be the person who accepts AI output fastest, but the person who can frame the problem, verify evidence, protect information and explain the decision.

Research agenda and empirical validation

For researchers, the framework generates an empirical agenda. Comparative African studies can test whether OAG dynamic capabilities predict IPSAS implementation quality, whether stakeholder engagement mediates public-value outcomes and whether GenAI use improves timeliness without reducing reliability. Quasi-experimental pilots could compare AI-assisted and conventional disclosure reviews. Longitudinal research could examine deskilling, staff identity, institutional memory and distributional effects between central and subnational entities. Research should also develop Africa-relevant measures of AI readiness in public finance, building on continental and GovTech initiatives but incorporating financial-data quality, professional-accountability and sovereign-data dimensions.

Empirical testing should also guard against mistaking faster production for public value. Automating a fragmented reporting system may produce faster fragmentation; generating more disclosures may increase volume without comprehension; and predictive tools may centralise power without accountability. Evaluations should therefore measure error severity, reporting cycle time, disclosure completeness, audit adjustments, user comprehension, incident rates, cost, deskilling and whether liabilities, assets and fiscal risks are acted upon. These outcomes require baseline data and longitudinal or quasi-experimental designs; a count of prompts, licences or trained staff is insufficient.

The expanded method and cases improve analytical transparency but do not remove the study's empirical limitation. Official reports can differ from operational reality, the selected cases are not representative of all African legal and administrative traditions, and no case establishes that GenAI has caused better IPSAS outcomes. Field-based research should therefore include OAG staff, line ministries, auditors, ICT and data-protection officials, system logs and document-quality measures. Controlled pilots should be independently evaluated before the framework is treated as validated practice.



CONCLUSION

The Office of the Accountant General must remain the guardian of lawful and reliable public accounting, but its future relevance depends on moving beyond a narrow stewardship identity. IPSAS implementation, fiscal complexity and digital transformation require an institution that leads standards, data, systems, capability, research and cross-government learning. GenAI can strengthen this role by widening access to technical knowledge, accelerating review and supporting analysis. It cannot substitute for reliable records, professional judgement, institutional authority or public accountability.

The decisive issue is therefore not whether African OAGs adopt GenAI, but whether they possess and develop the capabilities to govern it in the service of substantive reform. A strategic OAG combines foundational capacity, dynamic adaptation, stakeholder co-production and responsible human-AI collaboration. When these

conditions are aligned, IPSAS becomes more than a reporting framework: it becomes an infrastructure for resilience, transparency and public value. When they are absent, both IPSAS and GenAI risk becoming symbols of modernisation without corresponding institutional change. The proposed framework provides a basis for country diagnostics, empirical testing and phased implementation suited to Africa's diverse reform contexts.

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