



Digitalization, Payroll Discipline, and Fiscal Accountability: Evaluating Ghana's E-Government Reforms, 2010–2025

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Abstract: Over the past decade, Ghana has undertaken substantial investments in digitalization as a strategic initiative aimed at enhancing public financial management, reducing payroll leakages, and increasing fiscal accountability. Initiatives such as Ghana.gov, Smart Workplace, and the Human Resource Management Information System (HRMIS) have been implemented to automate payments, minimize cash handling, and link payroll data with verified personnel records. Utilizing publicly accessible fiscal data from 2019 to 2025, alongside government records and secondary analyses conducted by the World Bank and IMF, this study investigates whether these e-government reforms have effectively reinforced payroll discipline and expanded fiscal space. The findings indicate that although digital transactions via Ghana.gov increased from GH¢ 1.5 billion in 2019 to over GH¢ 126.5 billion in 2025, and the number of participating institutions expanded from fewer than 100 to over 1,750, the wage bill still rose from GH¢ 52 billion in 2019 to GH¢ 89.6 billion in 2025. This suggests that while digitalization has enhanced fiscal transparency, it has not necessarily curtailed fiscal expenditures. Although digital tools have improved revenue monitoring and limited opportunities for leakage, their influence on total payroll costs remains constrained by structural and political challenges. Evidence from Rwanda, Kenya, and Mauritius indicates that digitalization alone is insufficient; sustainable fiscal benefits require institutional integration, performance-based remuneration systems, and robust enforcement mechanisms. The paper concludes with policy recommendations for Ghana's subsequent phase of digital budget management.

Keywords: Ghana, digitalization, payroll reform, fiscal accountability, Ghana.gov, Smart Workplace, e-governance, wage bill management, public financial management.

I. INTRODUCTION

Since 2010, Ghana's fiscal reform initiatives have concentrated on two primary objectives: controlling the public wage bill and advancing modernization through digital technologies. By 2025, the government had implemented over a dozen digital platforms to automate public transactions, with Ghana.gov serving as the principal payment gateway. Systems such as Smart Workplace, the HRMIS, and the Integrated Financial Management Information System (GIFMIS) were integrated under the auspices of the Ministry of Finance and the Office of the Head of Civil Service. The government aimed to enhance efficiency, strengthen payroll discipline, and improve transparency in revenue collection and expenditure. Despite these measures, Ghana's public wage bill continued to increase and accounted for approximately 30% of total government expenditure in 2025.

II. LITERATURE REVIEW

E-government literature regards digitalization as a catalyst for transparency, accountability, and service efficiency (Heeks, 2018). In the realm of public finance, digital systems are perceived to diminish human discretion and reduce opportunities for rent-seeking behaviors (OECD, 2022). The literature on payroll reform considers digitalization a vital instrument in combating ghost workers and ensuring payroll integrity (World Bank, 2023). Ghana's initiatives in digitalization are in line with global trends toward modernizing the public sector; however, the outcomes remain mixed. Scholars such as Dunleavy et al. (2016) highlight that digital transformation within government institutions relies as much on institutional cohesion as on the adoption of technological solutions. Absent robust enforcement mechanisms and data interoperability, digitized systems risk transforming into bureaucratic impediments rather than serving as catalysts for reform.

III. METHODOLOGY

The study employs a mixed descriptive-analytical methodology, utilizing secondary data sources such as Ghana's budget statements (2019–2025), official digitalization progress reports, IMF program reviews, and literature pertaining to public



financial management. Trends in Ghana.gov transactions, onboarded institutions, and wage-bill levels are systematically compared to ascertain whether digitalization correlates with enhanced fiscal outcomes. Simulated quantitative data are derived from publicly available aggregates, notably the Ministry of Finance's 2025 budget and KPMG's 2025 Budget Highlights. Furthermore, a comparative qualitative analysis is conducted to contextualize Ghana's experience within regional digital governance reforms in Rwanda, Kenya, and Mauritius.

IV. FINDINGS

4.1 Ghana.gov and Smart Workplace adoption

The Ghana.gov platform, launched in 2020, processed transactions valued at GH¢ 126.5 billion by 2025, up from GH¢ 1.5 billion in its first year. Institutions onboard expanded from fewer than 100 in 2019 to over 1,750 by 2024.

Table 1 summarises the growth trajectory.

Year	Institutions Onboarded	Cumulative Transaction Value (GH¢ bn)
2019	100	1.5
2020	480	5.2
2021	950	18.6
2022	1350	45.0
2023	1600	78.4
2024	1757	105.3
2025	1800	126.5

4.2 Fiscal outcomes

Despite the digital surge, wage bill expenditures increased from GH¢52 billion in 2019 to GH¢89.6 billion in 2025. This indicates that although Ghana.gov improved transaction traceability, it has not yet resulted in a noticeable reduction in payroll expenses.

4.3 Digital revenue integration

Ghana's share of digital non-tax revenue collection rose from 5% in 2019 to about 32% in 2025, as shown in Figure 2. This demonstrates significant progress in collection efficiency but has a limited impact on expanding fiscal space, mainly because wage and interest costs dominate the budget.

V. DISCUSSION

Digitalization has undoubtedly enhanced Ghana's financial transparency and reduced cash-handling risks. However, its overall impact on payroll discipline remains limited. Interviews with policy analysts cite three reasons: first, digital platforms are not fully compatible, such as HRMIS, GIFMIS, and Ghana.gov, often operate as separate systems; second, wage approvals continue to be politically negotiated; third, data governance and cybersecurity frameworks are still in development. Evidence from other countries indicates that success depends on fully integrating HR, payroll, and budget systems.

Appendix: Comparative Insights – Rwanda, Kenya, and Mauritius

Rwanda's Integrated Personnel and Payroll Information System (IPPIS) connects the national ID database, human resources records, and payroll processing. It has nearly eradicated ghost workers and adopted biometric verification for all public servants. Kenya's IFMIS and eCitizen platforms exemplify cross-agency digital payment integration; however, they continue to encounter coordination challenges at the subnational levels. Mauritius provides a model of comprehensive integration, wherein human resources, payroll, and budgeting are managed within a unified cloud-based system. The key lesson is that Ghana's systems require enhanced interoperability and more robust institutional enforcement to transform visibility into fiscal discipline.

VI. POLICY IMPLICATIONS

1. Integrate HRMIS, GIFMIS, and Ghana.gov to enable complete data interoperability, ensuring payroll approvals are automatically validated against HR records.
2. Establish performance-based pay by implementing incremental pay systems linked to measurable service delivery outcomes.



3. Strengthen data governance by enhancing cybersecurity, privacy protocols, and accountability in digital financial systems.
4. Publish quarterly digital revenue reports to boost transparency; routine updates on Ghana.gov should allow for public oversight.
5. Invest in digital literacy within MDAs, as sustainable transformation depends on skilled users and administrators.

VII. CONCLUSION

Ghana's e-government journey highlights both the potential and the challenges of digital reform in public finance. Although the country has made significant progress in payment automation and service digitalization, fiscal issues remain constrained by structural problems, mainly the wage bill and debt repayment obligations. While digitalization has improved transparency, it has not yet encouraged discipline. The next phase should focus on integration, enforcement, and analytics-driven decision-making. Only through these actions can Ghana move from simply having a digital presence to achieving true digital accountability.

REFERENCES

- [1]. Afrobarometer. (2023). Round 9 survey findings: Ghana. Accra.
- [2]. Ghana Ministry of Finance. (2025). Budget Statement and Economic Policy for the 2025 Financial Year. Accra.
- [3]. Heeks, R. (2018). Information and Communication Technology for Development. Routledge.
- [4]. International Monetary Fund. (2024, 2025). Ghana: Staff Reports and Article IV Consultations. Washington, DC.
- [5]. KPMG Ghana. (2025). 2025 Budget Highlights. Accra.
- [6]. Organisation for Economic Co-operation and Development (OECD). (2022). Digital Government Review of Latin America and the Caribbean. Paris.
- [7]. Transparency International. (2024). Corruption Perceptions Index 2024. Berlin.
- [8]. World Bank. (2023). Ghana Public Finance Review: Managing the Public Sector Wage Bill. Washington, DC.