

Analysis of the Prospects and Challenges of E- administration in Public Sector Efficiency in Nigeria (1999-2026)

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Abstract: This study examines the prospects and challenges of e-administration in public sector efficiency among selected Federal Ministries in Nigeria (Finance, Justice, Energy, and Mineral Resources). Guided with five specific objectives, it explores dynamics of administrative activities over the period 2020–2025; to understand certain administrative issues such as public transparency gains, extent of adoption of e-administration across Ministries, Departments, and Agencies (MDAs), barriers to implementation, cost-effectiveness and strategies for improving e-administrative up take. The study follows institutional theory and the Unified Theory of Acceptance and Use of Technology (UTAUT) and adopted a mixed methods research design, with primary data obtained from 135 administrative related personnel through a validated structured questionnaire and semi structured interview guide. One sample t-tests and descriptive statistics ($\alpha = 0.05$) were adopted for quantitative analysis, while qualitative data were thematically analyzed. Findings among others, showed prospects of transparency in public administration, which has high benefit (mean = 4.58; SD = 0.65; $t = 28.654$; $p < 0.05$), it further reveals that digital administrative platforms significantly ameliorate public corruption. E-administration also reduces administrative costs and time wasting (mean = 4.55; SD = 0.71; $t = 29.042$; $p < 0.05$). Major challenges include limited ICT infrastructure (mean = 4.40; SD = 0.99; $t = 19.289$; $p < 0.05$), poor institutional frameworks for enforcement (mean = 4.45; SD = 1.05; $t = 22.841$; $p < 0.05$), inadequate organizational commitment (mean = 4.03; SD = 1.00; $t = 11.952$; $p < 0.05$). The five null hypotheses were rejected at $p < 0.05$. Conclusion affirms that e-administration significantly has transformative potentials for public administration in Nigeria.

Keywords: Public Administration, Policy Response, E- Administration, Public Sector, Governance, Nigeria.

1. Introduction

Public administration is essential in contemporary public sector governance where public policies, decisions, governance, interests, power and competition traverse across various sectors in a given polity (Qiang, Chong, & Min, 2020; Li, Xing, & Lu, 2026). Scholars agree that effective public administration is imperative for economic development (Amadi & Ekekwe, 2014). Emerging concern however, has been how public administration could be tailored to meet organizational needs of both the government and the governed, in contemporary era fundamentally characterized by technological innovation such as the use of Information Communication Technology (ICT) in administration (Bosu, 2019). Thus, recent trends such as e-administration could be adopted to strengthen traditional public administration to ameliorate problems of transparency and accountability, delay and commitment to organizational principles as well as over-all organizational efficiency in the public sector domain (Aneke, Humayun, & Desta, 2019).

The digital age era has therefore ushered in a shift in both private and public administration and broader human relations across various sectors (Onwunyi & Okoli, 2017). In the evolving administrative context, the traditional practices in administration, fundamentally characterized by paper-based, analogue, manual, and well-known bureaucratic bottlenecks, have shown that there are new and emerging challenges in public administration to meet the demands and challenges of organizational transparency, accountability, responsiveness and over-all efficiency (Obike, 2022). Thus, the notion of organizational efficiency has given rise to a shift to a more technology-based system of administration in the public sector to respond to more dynamic management, promote inclusiveness, seamlessness and timeliness referred to as e-administration. E-administration as a concept, captures the collation of various relevant information and procedures into administrative processes to enhance organizational efficiency and effectiveness. The notion of e-administration suggests a new era in administration and management, as digital tools and mechanisms are fundamental in the administrative processes to strengthen organizational performance (Tambulasi, 2020).

Recent studies have demonstrated that e-administration focuses predominantly on digital transformation of administration, which includes documentation, information dissemination, decision making, communication, internal coherence and overall service delivery (Aderonmu, Owolabi & Iyiola, 2019; Efeurhoo, 2026). In public sector management, the term is related to e-governance within the public sector, thus-administration extends to a wide range of formal interaction including planning, functioning and operational relations in a public setting. Thus, e-administration is symbolic in organizational workflow, resource optimization, and efficiency in service delivery. Following the rise of digital awareness and literacy, increasing demand for transparency and public accountability, emerging quest in the world order towards Artificial Intelligence (AI) and automation, various organizations world

over are increasingly moving towards e-administration in order to remain relevant and competitive (United Nations, 2022; Udoh, 2024).

In Nigeria, effective public administrative systems are recognized as foundational to national development, efficient service delivery, and economic development. Nigeria has followed global e-administration trends such as the National e-Government Master Plan (2019), the National Digital Economy Policy and Strategy (NDEPS) 2020–2030, and recent efforts aimed at automating basic government functions (Ministry of Communications, Innovation and Digital Economy, 2022). However, with the growing challenges of public accountability, trust, transparency and public corruption alongside the broader rise of bureaucratic bottlenecks across the Ministries Departments and Agencies (MDAs), it appears that e-administration is essential for organizational efficiency.

Against this background, this study follows institutional theory and the Unified Theory of Acceptance and Use of Technology (UTAUT) and demonstrates the prospects of e-administration. It demonstrates that existing perspectives affirm the various benefits of administration which is essential for effective bureaucracy (Obiefuna, 2025). Such perspective reflects contending relevance of e-administration in the processes of public administration as an approach MDAs can maximize organizational potentials by adopting transparent, accountable and cost-effective administrative practices (Viana, 2021).

The study analyzes the prospects and challenges of e-administration to overcome the constraint of public sector corruption, transparency and accountability, and the role of public office holders in upholding e-administrative practices. The article argues for the transform public administrative practice by highlighting the prospects as well as challenges of e-administration. It draws on three relevant federal ministries in Nigeria namely; Finance, Justice, Mineral and natural Resources and demonstrates the relevance of e-administration in advancing modern public administrative services. In particular, it draws attention to the benefits of e-administration in promoting transparency and accountability across the selected ministries, which is essential for organizational efficiency.

It further explores the related challenges of e-administration such as issues of poor technological know-how, financial constraints, issues of automation of e-administration as well as seamlessness, challenges of effective, timely and responsive documentation, which are often ignored in e-administration studies in the developing countries such as Nigeria. Thus, the notion of analogue public administration practice will be critiqued and, in the alternative, the study makes a case for e-administration as essential and necessary for inclusive and developmental public administration.

2.The Concept of E-administration

Electronic administration (e-administration) has emerged as a transformative innovation in public sector administration, management and governance, representing the integration of information and communication technologies (ICT) into administrative processes in a public setting to enhance efficiency, transparency, and accountability. E-administration encompasses the automation and digitalization of administrative functions, including organizational needs assessment, monitoring evaluation, and capacity building among public administrators (Afolabi & Ayo, 2023).

E-administration is not merely a technological tool but a comprehensive governance mechanism that restructures administrative workflows, minimizes human discretion, and institutionalizes administration. It integrates several modules such as e-reporting, e-planning-sourcing, e-catalogues, administrative lifecycle management systems, and organizational functions and outcome platforms. These modules collectively ensure seamless administrative processes and cycles, which reduce duplication, delay and non-transparency in public organizational management systems.

Globally, the adoption of e-administration has been driven by the need to foster transparency, accountability, check public corruption, improve efficiency in public service delivery, and achieve value for money in public expenditure. In developed economies, e-administration systems are fully integrated into broader digital government frameworks, enabling real-time monitoring and open contracting (World Bank, 2023). In developing countries, however, adoption has been uneven due to infrastructural and institutional constraints.

In Nigeria, e-government gained prominence following democracy and governance reforms initiated pioneered by the World Bank (World Bank, 2023). There have been some policy frameworks guiding e-governance, such as: National e-Government Master Plan (2019); NITDA Act; NDEPS 2020–2030; Nigeria Data Protection Act (2023); among other sectoral ICT policies. Despite global reform agenda, implementation remains a significant challenge in Nigeria. For example, public corruption remains on the increase in Nigeria as Transparency International's 2026 corruption perception index suggests.

The literature on e-governance has a long tradition in public sector and the various processes of administrative transaction such as policy formulation, responses and implementation. However, empirical studies have shown that e-administration strengthens governance performance. For example, e-administration as Sienkiewicz-Małyjurek and Zyzak (2025); elaborate exists in contexts characterized by transparency, accountability, technological innovation, automated documentation and digital response to administrative issues in the functioning of governance and decision making. However, they emphasized that recent shifts have occurred following IT revolution in the era of AI the stress that modern technologies, such as AI, blockchain, big data, and social

media are gaining recent traction across public services. Some scholars posit that e-administration provides secure and safe administrative mechanisms, which are not only timely rather accurate and precise. Ansell and Miura, (2020) contend that the power of digital platforms could be adequately harnessed for effective governance. In our context, e-administration offers such transparent, seamless and fast governance dynamics. Similarly, Bekkers, (2009) argues that e-administration offers flexible information infrastructure in government. In particular, Chen and Lee (2018); emphasize the relevance of collaborative data networks for public service and in particular dynamics of governance, management, and performance. In essence, e-administration checks administrative anomaly, and promotes collective engagement in public administration.

In addition to collective engagement-administration sustains record keeping and promotes organizational efficiency through inclusiveness as relevant stakeholders are involving in the entire processes, particularly through platforms and data accessibility it promotes information dissemination. Such context is akin to democratization of administrative processes, which contributes to the overall organizational efficiency unlike analogue system that is fundamentally entrenched in bureaucratic bottleneck.

3. Benefits of E-administration in the Public Sector

The herald to e-administration is necessitated by a number of benefits. Generally, e-governance initiatives include digital systems and platforms, various online administrative portals, national and state-level digital platforms, which provide accessible, seamless, open, and responsive bureaucracies. The benefits of e-administration are multidimensional, encompassing economic, administrative, social, political etc. The following benefits could be examined;

Accountability

Beyond being seamless and accessible-administration is fundamentally aimed at accountability. This includes systemic recording of administrative activities to promote organizational measurement, evaluation and accountability. While digital platforms offer real-time access to administrative procedures and requisite information, it also takes stock of the various processes or interactions in administration. Such processes encompass, administrative evaluation criteria, role specification and performance, general records and reports, and status of implementation of organizational tasks and targets. Because of the strategic relevance of openness in organizational performance, secrecy and asymmetries in information dissemination, which limits opportunities for corrupt practices such as: embezzlement and contract inflation are checked (Boafo et al., 2020).

Transparency

Generally, one of the most widely acknowledged benefits of e-administration is enhanced transparency. Transparency also strengthens accountability by creating digital audit trails that can be easily reviewed by oversight institutions, civil society organizations (CSOs), and the public. In the Nigerian context, where public corruption has historically undermined effective and efficient service delivery, e-administration offers transparent trails that could serve as a check to all forms of public corruption.

Cost Effectiveness

E-administration largely reduces overall cost of governance by removing the high costs in manual processes, it reduces over reliance on paperwork associated with mistakes and waste of materials, and minimizes administrative costs including overhead. A number of studies have shown that digital systems reduce cost of administration up to 15% (Boateng, 2025). Such cost effective administration is achieved through the adoption of harmonized cost in line with international best practices. Such process reduces processing time, offers improved price competition, and commensurate demand articulation. Through seamless and accountable administrative mechanisms, efficiency is achieved. Thus, efficiency gains are evident within a short administrative span, as prompt decision-making are put in place, with improved stakeholder coordination. Further, prompt and timely administrative response is achieved through automation of routine tasks. This effect allows administrative personnel to focus on strategic administrative functions such as: organizational relationships, adequate personnel management and evaluation mechanisms.

Open Administration

Digital administrative systems, easily and seamlessly generate large volumes of data that can be easily accessed, analyzed and interpreted to improve administrative planning, coordination, directing and overall policy formulation, which is flexible and pro-development (AU,2020). Stakeholders and policy makers can leverage on digital administrative data to identify administrative patterns, identify gaps and adopt alternative administrative policy measure.

4. Challenges of Adopting e-administration

Despite its numerous benefits, e-administration and its adoption has been faced with various challenges, especially among the low-income countries of the Global South.

In Nigeria, public administration has been faced with a number of challenges such as lack of accountability, inefficiency, weak capacity, poor service delivery, official secrecy, lack of transparency etc. Following Nigeria's nascent democratic since 1999, successive governments have adopted some form of reform agenda such as civil service reforms, anti-corruption institutions and due process initiatives. However, the conduct of the bureaucracy has been increasingly sub-optimal (Amadi & Ekekwe, 2014). E-governance has thus, been introduced as a reform agenda and strategy, envisioned to transform access and use of ICTs in the public service delivery in order to improve citizens' participation, transform government processes, promote accountability, strengthen transparency and stimulate quality service delivery (Ndubuisi & Obikeze, 2020). Across the world, e-governance mechanism encompasses a wide range of activities including online tax payment systems, official digital portals, and integrated civil service management platforms, which have emerged as basic instruments for innovative public administration to promote democratic governance (UN E-Government Survey, 2022).

Digital Illiteracy

Following the notion of traditional processes of administration, transition to e-administration is faced with the dire challenge of limited technical know-how as most personnel are not digital compliant. Thus, non digital literacy remains a limitation to the adoption and implementation of e-administration. In their study, Spante, Hashemi, Lundin and Algers (2018) identified digital literacy as essential for public sector development. Such perspectives have given rise to debates on advancing the relevance of digital literacy in the public sector service delivery (Cinque, & Bortoluzzi, 2013).

Lack of ICT Infrastructure

Lack of ICT infrastructure has been a major limitation to e-administration in the low income countries of the Global South. In Nigeria, limited ICT infrastructure has been a constraint to digital transformation (Efeurhobo, 2026). This has been a critical barrier to the adoption of e- adoption. A number of factors have been classified as strands of limited ICT infrastructure such as absence of requisite hardware, weak or unstable internet connectivity, lack of digital systems of interaction and unstable power supply. In a related study, Salifu et al. (2023) put forward an explicit exploration of the constraint of ICT, which undermines public sector institutions in sub-Saharan Africa (SSA).

Financial Constraints

Generally, finance is a factor in effective adoption of e-administration mechanisms. The overall cost of adoption and implementing e-administration systems ranges broadly from acquisition of software, training, infrastructure development, can pose limitations to the use or adoption of e-administration across sub-national and national governments.

Poor Capacity Building

In Nigeria and most developing countries of the South, poor capacity building on digital innovation has been a limiting factor to e-administration. Thus, with lack of capacity to deploy digital platforms, there is minimal organizational output, which undermines efficiency. Thus, technical skills should be enhanced through digital literacy programmes, capacity building workshops and seminars etc. among administrative personnel to incentivize effective organizational performance and adequate utilization of e-administrative systems.

Organizational Commitment

Weak response or non-commitment to organizational responsibility and similar inertia as well as entrenched bureaucratic bottleneck undermines efficiency in public administration and pose significant challenges to the adoption of e-administration. Most times civil servants who are accustomed to analogue or manual systems of administration often demonstrate laxity to digital systems and technology innovation in public administration. Such resistance to modern facilities undermines digital transformation and results in laxity, complexity and organizational inefficiency.

5. Theoretical Framework

This study builds on two major theoretical frameworks: Institutional Theory and Unified Theory of Acceptance and Use of Technology (UTAUT) to examine the interactions and emerging outcome in e-administration among Nigeria's federal ministries. To reassert the relevance of these theories, we explore them analytically:

5.1 Institutional Theory

This study explores an analysis of e-administration with a framework that draws on the institutional theory. Institutional theory explores institutional dynamics in organizations including interactions, which shape the broader behavior and outcomes in institutions (North, 2005), and explains how organizational behavior is shaped by external pressures rather than purely rational efficiency considerations, which are integral to the overall performance and outcomes of government policies. Institutional theory is suitable for our analysis as it explains why e-administration uptake could occur symbolically (for legitimacy) rather than functionally (for efficiency). Meyer & Rowan (1977), and Scott (2001), posit that organizations respond to three types of pressures:

Coercive pressures – laws, regulations, government mandates

Normative pressures – professional standards and expectations

Mimetic pressures – imitation of successful organizations.

In Nigeria, coercive pressure is weak at the state level due to lack of enforceable laws mandating e-administration. This explains multiple challenges including inconsistent adoption across states.

Normative pressure arises from regulatory dynamics including professional bodies and international standards promoting transparency and accountability.

Mimetic pressure emanates when organizations strive to replicate valued standards, which occur when organizations or units within a system attempt to replicate successful initiatives.

5.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT is an offshoot of Technology Acceptance Model (TAM) (Venkatesh et al., 2003). The Technology Acceptance Model (Davis, 1989) is one of the most influential models for explaining user adoption of information systems. TAM posits that two key variables determine technology acceptance:

Perceived Usefulness (PU) the degree to which a person believes that using a system enhances job performance

Perceived Ease of Use (PEOU) the degree to which a person believes that using the system will be free of effort. TAM also suggests that external variables such as training, system design, and organizational support indirectly influence adoption through PU and PEOU. This explains why capacity building initiatives are central to successful e-administration practice by integrating multiple models into a unified framework. It identifies four key determinants:

Performance Expectancy – belief that the system improves job performance

Effort Expectancy – ease associated with system use

Social Influence – extent to which others influence usage

Facilitating Conditions – availability of infrastructure and support

In the context of e-administration, administrative officers and related practitioners are more likely to adopt digital systems when they perceive them as improving efficiency, reducing workload, and enhancing transparency.

However, in most low income countries such as Nigeria, perceived ease of use becomes particularly critical due to varying levels of digital literacy. Where systems are complex or training is inadequate, adoption rates decline significantly.

UTAUT is particularly relevant in this study because it incorporates organizational and environmental factors, which are critical in public sector settings. In Nigeria, there is poor infrastructure, which suggests weak e-administration facilitating conditions.

Further, leadership commitment influences social influence and overall behaviour and outcome in organizational setting. Relatedly, training affects broader effort expectancy and sustains the growth of an organization. Thus, UTAUT provides a more holistic explanation of e-administration adoption compared to TAM.

A critical review of the literature reveals several significant gaps. First, existing Nigerian e-administration research demonstrates poor emphasis on stepping it up among MDAs and institutionalize efforts or strategies to strengthen organizational efficiency. Secondly, most studies present generalized findings without examining inter agency factors and political, socio-economic and institutional conditions of Nigeria. Thirdly, much of the studies rely on descriptive analysis, without adequate empirical analyses or rigorous hypothesis testing. More importantly a number of existing studies examine public or private sectors in isolation, precluding cross-sector comparative analysis among MDAs. The present study seeks to fill the identified gaps by offering a more detailed exploration of e-administration among three Ministries in Nigeria, namely; Finance, Justice, Energy and Natural Resources.

6. Methodology

6.1 Study Area

The study was conducted across three purposively selected Ministries in Abuja namely; Finance, Justice, Energy, and Natural Resources chosen for their administrative, political and economic significance, as well as their strategic relevance with high administrative activity and relevance in organizational efficiency.

6.2 Research Design and Population

The study adopted a mixed-methods survey research design, including quantitative and qualitative approaches. The target population comprised 204 key stakeholders — administrative officers, Finance personnel, policymakers, senior administrators — drawn from the studied ministries. The sample size of 135 respondents was determined using Yamane's (1967) formula at a 5% significance level ($n = N / [1 + N(e^2)] = 204 / [1 + 204(0.05^2)] \approx 135$). Purposive sampling was adopted to select respondents knowledgeable of public sector administration.

Table 1: Sample Distribution of Respondents by Category

Stakeholder Category	Finance	Justice	Energy and Natural Resources	Total
Admin. Officers	35	17	24	76
Finance personnel	20	13	10	43
Senior administrators	15	10	9	34
Policy makers	30	10	11	51
Total	100	50	54	204

Source: Researcher's Field Survey (2025).

6.3 Data Collection and Analysis

The study adopted validated structured questionnaire (20 items on a 5-point Likert scale), and a semi-structured interview guide to collect primary data. Instruments were administered both in person and electronically through Google Forms. Quantitative data were coded and analyzed using SPSS version 25; descriptive and inferential statistics were used to analyze the data (frequency distributions, means, standard deviations) and (one sample t-test, $\alpha = 0.05$). Thematic analysis was adopted to analyze qualitative data from interviews following Braun and Clarke's (2006); six phase model, which yielded five key themes linked to the study objectives. The study maintained ethical compliance through informed consent, voluntary participation of respondents and strict confidentiality.

7. Results and Discussion

7.1 Demographic Profile of Respondents

The study had a total of 135 valid responses. Females had 41.5% respondents and males 58.5% demonstrating gender composition of public administrative roles in the study area. Participants were mainly within the 40–49 age bracket (28%), followed by 30–39 years (26%), reflecting experienced and professionally active administrative personnel. Educational qualifications were predominantly at the Bachelor's degree level (50%), followed by Master's degree holders (26%), demonstrating a literate respondent

based with adequate conceptual understanding of e-administration. Notably, 47% of respondents reported over 10 years of administrative experience, confirming familiarity with both modern (digital) and traditional administrative systems.

Objective I: E-administration promotes —Transparency

Table 2 presents the one sample t-test results for assessing transparency as the primary benefit of e-administration (Objective I).

Table 2: One-Sample T-Test — Transparency (Objective I)

Variable	Mean ($\bar{x}$)	Std. Dev.	t-value	p-value
Transparency.	4.58	0.65	28.654	0.000

Source: Researcher's Field Survey (2025); Test Value = 3.0

Transparency was the most highly rated benefit of e-administration (mean = 4.58; SD = 0.65; $t = 28.654$; $p < 0.05$), leading to rejection of H_{01} . Respondents perceived digital administrative platforms as the most effective tool for checking official corruption and ensuring competitive fairness. Qualitative responses reinforced this, with an administrative officer stating: 'With everything online, it is difficult to hide information or alter records.' These findings align with Afolabi, and Ayo, (2023); who confirmed that e-taxation improves transparency in public revenue administration. Similarly, Chiekezie, and Aniekwe, (2024); found that e-governance promotes the performance of public service management in Nigeria. In Nigeria's public sector, bureaucratic bottleneck, secrecy, mistrust and non open governance have been at issue. Respondents emphasized that online disclosure is gradually rebuilding public confidence in public administrative processes.

Objective II: E-Administration strengthens — Organizational commitments

Table 3 presents results assessing organizational commitments as consequences and determinants of the adoption of e-administration (Objective II).

Table 3: One-Sample T-Test — Organizational commitments (Objective II)

Variable	Mean ($\bar{x}$)	Std. Dev.	t-value	p-value
Organizational Commitments.	4.03	1.00	11.952	0.000

Source: Researcher's Field Survey (2025).

Organizational commitments had a mean score of 4.03 (SD = 1.00; $t = 11.952$; $p < 0.05$), rejecting H_{02} . Critically, qualitative findings reveal that commitment is informed more by inadequate training, remuneration and lack of digital infrastructure, consistent with TAM's emphasis on perceived ease of use as an adoption determinant. A policy maker in Abuja remarked: "The worry is not about loss of job rather people are not confident using the computer". This finding is in sync with Heeks, (2006); who insists on the need to promote, implement and manage e-governance for organizational efficiency and Nwinyokpugi and Nwosu, (2021); who made a case for e-governance as essential for administrative efficiency in the Nigerian public service. Further, Agranoff, and McGuire (2001); identified some of the key questions in public network management to improve public administration research.

Objective III: Challenges — Technological Infrastructural Constraints

Table 4: One-Sample T-Test — Technological Infrastructural Constraints (Objective III)

Variable	Mean ($\bar{x}$)	Std. Dev.	t-value	p-value
Technological Challenges.	4.40	0.99	19.289	0.000

Source: Researcher's Field Survey (2025).

Inadequate ICT infrastructure was identified as the most significant barrier to the implementation of e-administration (mean = 4.40; SD = 0.99; $t = 19.289$; $p < 0.05$), rejecting H_{03} . Qualitative evidence further revealed non availability of central administrative portal, leading to poor technology based administration and challenges of formal data reporting system. Some of the ICT Unit Workers highlighted that, 'Issues of internet connectivity has been an administrative constraint. Without adequate networks, e-administration will less likely be effective.' These findings are consistent with Heuberger, (2022); who identified challenges of coordinating digital

governance in relation to digital transformation of public administration in a federal context. In a related finding, Bovens and Zouridis (2002); identified the fundamental role of information and communication technology in strengthening and transforming administrative discretion and constitutional control.

Objective IV: Cost-Effective administration

Table 5: One-Sample T-Test — Cost-Effectiveness (Objective IV)

Variable	Mean ($\bar{x}$)	Std. Dev.	t-value	p-value
Cost-Effective administration.	4.55	0.71	29.042	0.000

Source: Researcher's Field Survey (2025).

E-administration was found to significantly enhance cost-effective system of administration (mean = 4.55; SD = 0.71; $t = 29.042$; $p < 0.05$), rejecting H_{04} . Respondents highlighted reductions in administrative costs, paperwork, administrative overhead, and processing time. A senior administrative officer observed, 'With e-recording, administrative reports are seamless; we save both time and logistics cost'. These findings are corroborated by Davis, (1989); who identified perceived usefulness, perceived ease of use, and user acceptance of information technology in public administration. Such usefulness is framed within the context of cost effectiveness, which promotes the value of e-administration.

Espousing cost effectiveness of e-administration, Nwachukwu and Pepple, (2015); posit that, Information and Communication Technologies (ICTs) are essential in public service delivery In Nigeria's civil service. Some studies posit that, e-administration promotes value for money through adequate managerial processes and data driven decision making (Oghuvbu, Gberville & Oni, 2022; Chiekiezie & Aniekwe, 2024). It further sustains digital competition among administrators and administrative offices also contributes to improved performance of various MDAs through the reduction of overall administrative costs.

Objective V: Administrative and Institutional Framework

Table 6: One-Sample T-Test — Administrative and Institutional Framework (Objective V)

Variable	Mean ($\bar{x}$)	Std. Dev.	t-value	p-value
Administrative and Institutional Framework.	4.45	1.05	22.841	0.000

Source: Researcher's Field Survey (2025).

Poor administrative and institutional enforcement emerged as a statistically significant constraint on e-administration uptake (mean = 4.45; SD = 1.05; $t = 22.841$; $p < 0.05$), rejecting H_{05} . Respondents indicated that state administrative practices are either analogue or outdated and not in sync with e-administrative provisions, allowing staff of MDAs, similar stakeholders and officials to evade digital procedures without any punitive measures or penalty. An administrator in one of the Ministries stated, 'There is no official laws compelling MDAs to deploy e-administration. Thus, the use relies largely on individual discretion or a matter of choice of the senior personnel in control. Such findings support the relevance of administrative and institutional enforcement as a theoretical frame that promotes the use of technological tools in response to technological innovation. For instance, Obike, (2022); conceives e-governance as a tool to fight against corruption in Nigeria. This perspective is further corroborated in the works of Raza, (2014); who identifies training and its development impact on organizational performance. While Turkel & Turkel (2016); theoretically advocate for public value, linking public interest to administrative autonomy, and efficiency in public administration. Further, Afolabi and Ayo (2023); highlight that, administrative efficiency in Nigeria is an attribute of strong regulations including adopting technological innovations.

7.2 Summary of Hypothesis Test Results

Table 7: Summary of Hypothesis Testing Results

H_0	Hypothesis Statement	t-value	p-value	Decision
H_{01}	No significant difference in transparency between e-administration and analogue systems among MDAs.	28.654	0.000	Rejected
H_{02}	Organizational commitments will not significantly influence the adoption of e-administration.	11.952	0.000	Rejected

H ₀	Hypothesis Statement	t-value	p-value	Decision
H ₀₃	Absence of capacity building will not significantly constrain the effectiveness of e-administration.	19.289	0.000	Rejected
H ₀₄	Saving of costs from e-administration will not be significantly higher than traditional methods.	29.042	0.000	Rejected
H ₀₅	Policy reforms and institutional strengthening will not significantly improve e-administration up take.	22.841	0.000	Rejected

Source: Researcher's Field Survey (2025); $\alpha = 0.05$

8. Conclusion

This study provides empirical evidence, which demonstrates that e-administration holds significant transformative potential for public sector administration in Nigeria. Across the study objectives, statistically significant findings confirm that e-administration enhances transparency and accountability, reduces transaction costs, and improves administrative efficiency. These benefits align with global best practices and substantiate the relevance of digital administrative platforms in curbing corruption and improving value for money in public service expenditure.

Despite its administrative potentials, the full realization of the various benefits of e-administration is constrained by divergent challenges: Lack of ICT which infrastructure has been a major limitation to e-administration and has constrained digital transformation (Efeurhobo, 2026). There are issues of financial constraints as the overall cost of adoption and implementation of e-administration systems remains challenging. **Moreso**, poor capacity building to deploy digital platforms, undermines organizational output, which has implications for efficiency. There are issues with inadequate response or non commitment to organizational responsibility and similar organizational laxity, which run counter to effective deployment of e-administration, as well as entrenched bureaucratic bottleneck. Thus, further research and adequate policy response is needed.

9. Recommendations

Based on the findings, the following policy and operational recommendations are proposed;

1. As an effective tool to run public organizations, e-administration should be adopted through the adoption of various technologically based approaches that could improve human resource development such as; the Integrated Human Resource and Payroll Systems, and the Integrated Financial Management Systems. These mechanisms have the capacity to promote human resource development and strengthen transparency, accountability and integrity in public administration including issues of public accountability with funds, budgeting and effective management of financial resources to ensure organizational efficiency.
2. There is need to boost power supply in Nigeria to overcome challenges of poor electricity supply. Since power is imperative on the functionality of e-administration improved power supply will stimulate the work force, enhance productivity and organizational performance.
3. Improving the ICT infrastructure and strategy. Without available and updated ICT infrastructure, it will be difficult to promote e-administration. Therefore, policies promoting digital devices use and updating of soft wares are imperative.
4. Open and free access to digital platforms and the internet is essential to promote e-administration in the public service sector. This will promote visibility, transparency and accountability.
5. Capacity building training and retraining of line staff is essential to promote and sustain e-administration among MDAs. This will stimulate desire for ICT, enhance the implementation of e-administration and broadly improves organizational performance.
6. E-administration practice should be strengthened to ensure timely and adequate data availability that will promote quality service delivery and particularly, meet organizational demands in the implementation of administrative functions in public service delivery domain.

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