



RESEARCH ARTICLE

DIGITAL GOVERNANCE AND PUBLIC SERVICE DELIVERY IN NIGERIA, 2010 – 2025

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ABSTRACT

Digital governance has crystallized as a transformative paradigm in Nigeria's public sector reform architecture, fundamentally reconfiguring the modalities of public service delivery. This study interrogates the nexus between digital governance and public service delivery in Nigeria from 2010 to 2025, a period characterized by intensified institutional digitization, platformization of administrative processes, and data-driven policy implementation. Situated within the reform continuum of the Nigerian Fourth Republic, the paper conceptualizes digital governance as the systemic integration of information and communication technologies into bureaucratic structures to enhance efficiency, transparency, and accountability. Anchored on the Technology-Organization-Environment (TOE) framework and Good Governance Theory, the study adopted a mixed-methods design. The population of the study comprised of staff and students of a selected institution, from which a sample size of 120 respondents and 8 key informants is drawn through random and purposive sampling techniques. Methodologically, the study integrates quantitative analysis using mean and standard deviation with qualitative thematic analysis of policy frameworks and institutional experiences. The analytical objective is to ascertain the extent to which digital governance initiatives exert measurable effects on service accessibility, responsiveness, procedural efficiency, and citizen satisfaction. Findings reveal a statistically significant and positive association between digital governance adoption and improvements in service delivery outcomes. Nonetheless, structural impediments, including infrastructural insufficiencies, digital asymmetries, cybersecurity vulnerabilities, and organizational inertia, attenuate the transformative potential of these reforms.

Keywords: Governance, digital governance, public service delivery; institutional reform, cyber security.

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1.0. INTRODUCTION

The rapid advancement of digital technologies has fundamentally transformed governance structures and public service delivery systems across the globe. In the twenty-first century, governments are increasingly leveraging digital platforms to enhance administrative efficiency, promote transparency, and improve citizen engagement. Within this evolving landscape, the concept of digital governance has emerged as a critical framework for understanding how information and communication technologies (ICTs) can be harnessed to reform public sector institutions and processes (Heeks, 2006; Ndou, 2004).

Digital governance, often conceptualized as the application of digital technologies in public administration, extends beyond mere e-government initiatives to encompass broader dimensions such as data-driven decision-making, institutional transparency, service accessibility, and participatory governance. It represents a shift from traditional bureaucratic models toward more responsive, citizen-centered systems that prioritize efficiency, accountability, and inclusiveness. As such, digital governance has become a cornerstone of contemporary public sector reform, particularly in developing countries striving to modernize their administrative systems (World Bank, 2016).

In Nigeria, the period between 2010 and 2025 has witnessed significant efforts toward the digitization of governance and public service delivery. The introduction of initiatives such as the Government Integrated Financial Management Information System (GIFMIS), Treasury Single Account (TSA), Bank Verification Number (BVN), and various e-government platforms reflects a deliberate attempt by the Nigerian government to streamline public administration, curb corruption, and enhance service efficiency. These reforms are aligned with global best practices and policy frameworks that emphasize the integration of ICTs into governance processes as a means of fostering sustainable development (United Nations, 2020).

Despite these advancements, the implementation of digital governance in Nigeria has been characterized by mixed outcomes. On the one hand, digital platforms have improved transparency in financial management, reduced bureaucratic bottlenecks, and enhanced access to certain public services. On the other hand, persistent challenges such as inadequate infrastructure, digital divide, limited technical capacity, cybersecurity concerns, and resistance to institutional change have constrained the full realization of digital governance objectives (Ndou, 2004; Heeks, 2006). These challenges are particularly pronounced in rural and underserved areas, where access to digital infrastructure remains limited.

Furthermore, the effectiveness of digital governance in improving public service delivery in Nigeria is influenced by broader socio-political and economic factors, including governance quality, policy consistency, institutional capacity, and citizen trust in government systems. The interplay of these factors raises critical questions about the extent to which digital governance initiatives have translated into tangible improvements in service delivery outcomes, such as efficiency, accessibility, responsiveness, and equity (World Bank, 2016). To this, the study establishes its major aims and objectives as follows; (a) To examine the influence of digital governance on public service delivery in Nigeria. (b) To assess the role of governance quality in enhancing the effectiveness of digital



governance on service delivery. (c) To identify the challenges affecting the implementation of digital governance in improving public service delivery.

Scholarly discourse on digital governance has increasingly emphasized the need to move beyond technological adoption to examine the actual impact of digital reforms on public service delivery. While existing studies have explored aspects of e-governance in Nigeria, there remains a gap in comprehensive analyses that assess the long-term effects of digital governance initiatives over an extended period, particularly from 2010 to 2025. This period is significant as it captures major policy reforms, technological advancements, and shifts in governance practices within the country (United Nations, 2020).

Against this backdrop, this study seeks to examine the relationship between digital governance and public service delivery in Nigeria, within the specified timeframe of 2010- 2025. The study aims to provide empirical insights into the effectiveness of digital governance reforms identify areas for policy improvement and contribute to the broader discourse on governance modernization by offering recommendations that will enhance the role of digital technologies in improving public sector performance in Nigeria.

1.1. Research questions

- (i). What is the influence of digital governance on public service delivery in Nigeria?
- (ii). How does governance quality affects the effectiveness of digital governance in service delivery?
- (iii). What are the challenges affecting the implementation of digital governance in improving public service delivery?

2.0 CONCEPTUAL REVIEW AND THEORETICAL FRAMEWORK

2.1. Conceptual Framework

Governance

Governance has evolved into a central concept in contemporary political science, public administration, and development studies, reflecting a shift from traditional notions of government to more complex systems of rule, coordination, and interaction among multiple actors. Unlike the conventional understanding of government as a hierarchical structure of authority, governance encompasses the broader processes through which power is exercised, decisions are made, and public affairs are managed within a society (Pierre & Peters, 2020).

It involves not only state institutions but also non-state actors such as the private sector, civil society organizations, and international bodies. At its core, governance refers to the mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their rights, meet their obligations, and mediate their differences. This broader conceptualization underscores the transition from state-centric models of administration to more networked and collaborative systems, where governance is produced through interactions among diverse stakeholders rather than through unilateral state control (Bevir, 2013).



One of the most influential frameworks within governance studies is the concept of good governance, which gained prominence through global development discourse. Good governance emphasizes principles such as accountability, transparency, rule of law, participation, effectiveness, and equity. These principles are widely regarded as essential for achieving sustainable development and improving public sector performance (World Bank, 2017). In this context, governance is not merely about the exercise of authority but about the quality and outcomes of that authority in promoting societal well-being.

In recent decades, governance has been increasingly associated with New Public Management (NPM) and network governance paradigms. The NPM approach advocates for efficiency, performance measurement, and the adoption of private sector practices in public administration. While NPM contributed to reforms aimed at improving service delivery, it has been critiqued for overemphasizing market mechanisms at the expense of public accountability (Hood & Dixon, 2015). In contrast, network governance highlights the role of inter-organizational collaboration, partnerships, and horizontal coordination in addressing complex policy challenges, reflecting the interconnected nature of modern societies (Klijn & Koppenjan, 2016).

Another important dimension of governance is its relationship with institutional capacity and state effectiveness. Effective governance requires strong institutions that can design and implement policies, enforce laws, and deliver public services efficiently. Weak institutional frameworks, often characterized by corruption, bureaucratic inefficiency, and policy inconsistency, undermine governance outcomes and hinder development efforts, particularly in developing countries. As such, strengthening institutional capacity remains a critical priority in governance reform agendas (Pierre & Peters, 2020).

Contemporary scholarship also emphasizes the role of technology in reshaping governance, giving rise to concepts such as digital governance and smart governance. These emerging paradigms reflect the integration of digital technologies into governance processes, enabling data-driven decision-making, enhanced transparency, and improved citizen engagement. However, the adoption of digital governance also raises concerns about data privacy, cybersecurity, and digital exclusion, highlighting the need for balanced and inclusive governance frameworks (Janssen & van den Hoven, 2020).

In the context of developing countries such as Nigeria, governance remains a critical determinant of public sector performance and socio-economic development. Challenges such as corruption, weak institutional frameworks, limited accountability, and policy discontinuity have historically undermined governance effectiveness. Despite various reform efforts, including anti-corruption initiatives and administrative restructuring, achieving sustainable governance outcomes continues to be a significant challenge. Nonetheless, recent reforms, particularly those leveraging digital technologies, offer new opportunities for enhancing transparency, accountability, and service delivery.

Furthermore, governance is inherently linked to public service delivery, as the quality of governance directly influences the efficiency, accessibility, and equity of services provided to citizens. Effective governance ensures that public resources are utilized efficiently, policies are implemented effectively,



and services reach the intended beneficiaries. Conversely, poor governance often results in service delivery failures, inequality, and diminished public trust in government institutions.

Governance is a multifaceted and evolving concept that encompasses the structures, processes, and interactions through which public affairs are managed. Contemporary discourse highlights its transition from hierarchical government systems to more inclusive, networked, and technology-driven models. While governance offers a framework for understanding and improving public sector performance, its effectiveness depends on the interplay of institutional capacity, policy frameworks, stakeholder engagement, and technological innovation. For countries like Nigeria, strengthening governance remains essential for achieving sustainable development and enhancing public service delivery outcomes.

Digital Governance

Digital governance has increasingly become a central pillar of public sector transformation in the twenty-first century, driven by rapid advancements in digital technologies such as artificial intelligence, big data analytics, cloud computing, and blockchain systems. Contemporary scholarship conceptualizes digital governance not merely as the digitization of government services, but as a holistic restructuring of governance processes, institutional interactions, and citizen engagement through digital ecosystems (Mergel, Edelmann, & Haug, 2019; Janssen & van den Hoven, 2020).

Recent studies emphasize that digital governance represents a transition from traditional e-government models toward digital-era governance, characterized by integration, openness, and user-centric service delivery. This transformation reflects a shift from hierarchical administrative systems to more networked, data-driven, and collaborative governance structures, where multiple stakeholders, including government agencies, private sector actors, and citizens, interact within digital platforms (Lindgren, Madsen, Hofmann, & Melin, 2019).

A key dimension of modern digital governance is data-driven decision-making, which enables governments to utilize large-scale data analytics to improve policy formulation and service delivery outcomes. According to Mergel et al. (2019), digital transformation in the public sector enhances efficiency by automating processes, reducing redundancies, and enabling real-time service delivery. This has significant implications for developing countries, where inefficiencies in public administration have historically hindered service delivery. Furthermore, digital governance is closely associated with open government and transparency initiatives. The availability of open data platforms and digital monitoring systems has strengthened accountability mechanisms by allowing citizens and civil society organizations to track government activities. Janssen and van den Hoven (2020) argue that digital transparency fosters trust in public institutions, although its effectiveness depends on data accessibility, quality, and institutional integrity.

Another critical aspect of digital governance is citizen engagement and co-production of services. Modern governance systems increasingly rely on digital platforms to facilitate interaction between governments and citizens, enabling participatory policymaking and feedback mechanisms. This participatory dimension aligns with democratic governance principles and enhances the responsiveness of public institutions (Lindgren et al., 2019).



However, despite its transformative potential, contemporary literature highlights persistent challenges associated with digital governance. One of the most significant issues is the digital divide, which continues to limit equitable access to digital services, particularly in developing countries. Unequal access to internet infrastructure, digital literacy, and technological resources can exacerbate existing socio-economic inequalities (van Dijk, 2020).

In addition, concerns related to data privacy, cybersecurity, and ethical governance have become increasingly prominent. As governments collect and process vast amounts of personal data, the risks of data breaches, surveillance, and misuse of information have intensified. Scholars argue that effective digital governance requires robust regulatory frameworks, institutional capacity, and ethical guidelines to ensure data protection and public trust (Janssen & van den Hoven, 2020).

Within the Nigerian context, recent studies indicate that digital governance initiatives have contributed to improvements in financial transparency and service efficiency, particularly through platforms such as digital payment systems and e-government services. However, challenges such as infrastructural deficits, policy inconsistency, and institutional resistance continue to hinder the full realization of digital governance objectives (Olaopa, 2021; Ayo, 2022). These challenges underscore the need for a comprehensive and context-sensitive approach to digital governance implementation.

Conclusively, contemporary scholarship presents digital governance as a dynamic and evolving framework that integrates technology, institutional reform, and citizen engagement. While it offers significant opportunities for improving public service delivery, its effectiveness depends on addressing structural inequalities, strengthening institutional capacity, and ensuring inclusive access to digital resources. For countries like Nigeria, the successful implementation of digital governance requires not only technological innovation but also sustained policy commitment and systemic transformation.

Public Service Delivery

Public service delivery constitutes a central function of governance and remains a critical indicator of the effectiveness and legitimacy of the state. It refers to the provision of essential services, such as education, healthcare, security, infrastructure, and administrative services, by government institutions to citizens in a manner that promotes welfare, equity, and development. Contemporary scholarship conceptualizes public service delivery not merely as the distribution of services but as a complex, multi-dimensional process involving policy formulation, institutional capacity, resource allocation, and citizen engagement (Osborne, 2020).

Traditionally, public service delivery was characterized by centralized, bureaucratic systems in which government agencies operated within rigid hierarchical structures. While this model ensured control and uniformity, it often resulted in inefficiencies, delays, and limited responsiveness to citizens' needs. In response to these limitations, reforms inspired by the New Public Management (NPM) paradigm emphasized efficiency, performance measurement, decentralization, and the adoption of private-sector practices in public administration (Hood & Dixon, 2015). These reforms sought to enhance service delivery outcomes by improving organizational effectiveness and accountability.



However, contemporary discourse has moved beyond NPM to embrace more collaborative and citizen-centered approaches to public service delivery. The concept of New Public Governance (NPG) highlights the role of networks, partnerships, and co-production in delivering public services. Under this framework, service delivery is seen as a shared responsibility involving government agencies, private sector actors, non-governmental organizations, and citizens themselves (Osborne, 2020). This shift reflects the growing recognition that complex societal challenges require coordinated and inclusive approaches.

A key dimension of effective public service delivery is quality, which encompasses attributes such as accessibility, timeliness, efficiency, equity, and responsiveness. Citizens increasingly demand services that are not only available but also delivered in a manner that is transparent, reliable, and tailored to their needs. As such, governments are under pressure to adopt innovative strategies that enhance service quality while optimizing resource utilization.

In recent years, digital transformation has emerged as a powerful driver of change in public service delivery. The integration of digital technologies into service delivery processes has enabled governments to improve efficiency, reduce costs, and expand access to services. Digital platforms facilitate online service provision, real-time communication, and data-driven decision-making, thereby enhancing the overall effectiveness of public service delivery (Mergel, Edelmann, & Haug, 2019). This transformation is particularly significant in developing countries, where traditional service delivery systems have often been constrained by infrastructural and institutional limitations.

Despite these advancements, public service delivery continues to face significant challenges, especially in developing contexts such as Nigeria. These challenges include inadequate infrastructure, bureaucratic inefficiencies, corruption, limited institutional capacity, and socio-economic inequalities. Such constraints undermine the ability of government institutions to deliver services effectively and equitably, resulting in disparities in access and quality across different regions and population groups (Olaopa, 2021).

Furthermore, the effectiveness of public service delivery is closely linked to governance quality and institutional performance. Weak governance structures, characterized by lack of accountability, policy inconsistency, and poor resource management, often lead to service delivery failures. Conversely, strong governance frameworks that promote transparency, accountability, and citizen participation enhance the efficiency and responsiveness of service delivery systems.

In the Nigerian context, efforts to improve public service delivery have included various reforms aimed at strengthening institutional capacity and enhancing efficiency. Initiatives such as public sector reforms, anti-corruption measures, and the adoption of digital technologies have yielded some improvements, particularly in areas such as financial management and administrative services. However, persistent structural challenges continue to limit the overall effectiveness of these reforms, highlighting the need for sustained and comprehensive approaches to public sector transformation.

Finally, public service delivery is a dynamic and evolving concept that lies at the heart of governance and development. Contemporary scholarship emphasizes the need for efficient, inclusive, and citizen-



centered service delivery systems that leverage technological innovation and collaborative approaches. For countries like Nigeria, improving public service delivery requires not only technological adoption but also institutional strengthening, policy consistency, and a commitment to good governance principles. Ultimately, the effectiveness of public service delivery serves as a key measure of the state's capacity to meet the needs of its citizens and promote sustainable development.

Governance, Digital Governance, and Public Service Delivery in Nigeria

Governance, as a multifaceted system of authority, decision-making, and institutional processes, provides the structural foundation for public administration and service delivery. The quality of governance directly influences how resources are allocated, policies are implemented, and citizens' needs are addressed (Pierre & Peters, 2020; Bevir, 2013). In the Nigerian context, governance structures have historically faced challenges such as bureaucratic inefficiency, policy inconsistency, corruption, and weak institutional capacity. These systemic weaknesses have often constrained the effective delivery of public services, undermining citizens' trust and limiting socio-economic development (Olaopa, 2021).

Digital governance emerges as a contemporary response to these governance challenges by integrating information and communication technologies (ICTs) into the institutional and administrative framework of the state. It represents not just the digitization of government operations but a transformative approach that enhances transparency, accountability, efficiency, and citizen engagement (Mergel, Edelmann, & Haug, 2019; Janssen & van den Hoven, 2020). Through digital platforms, governments can automate processes, reduce bureaucratic delays, and implement data-driven policy decisions, thereby addressing structural inefficiencies inherent in traditional governance systems.

The intersection of digital governance and public service delivery is particularly significant in developing countries like Nigeria. By leveraging digital technologies, public institutions can improve accessibility, responsiveness, and quality of services delivered to citizens. For instance, the adoption of digital financial management systems, e-government platforms, and online service portals has facilitated faster, more transparent delivery of services such as tax administration, business registration, and social welfare programs (Ayo, 2022). These innovations illustrate how digital governance serves as a mechanism through which governance reforms translate into tangible improvements in service delivery. However, the effectiveness of this linkage is contingent upon several factors.

The factors encompasses, first, institutional capacity—including technical expertise, policy coordination, and leadership commitment—plays a critical role in ensuring that digital governance initiatives are implemented effectively (Lindgren, Madsen, Hofmann, & Melin, 2019). Second, the digital divide remains a persistent challenge in Nigeria, with disparities in access to ICT infrastructure, internet connectivity, and digital literacy limiting equitable service delivery, particularly in rural and underserved communities (van Dijk, 2020). Third, issues related to cybersecurity, data privacy, and regulatory frameworks can constrain the potential benefits of digital governance if not adequately addressed (Janssen & van den Hoven, 2020).



Empirical evidence suggests that when these factors are appropriately managed, digital governance can significantly enhance public service delivery outcomes. For example, electronic platforms have improved financial transparency, reduced leakages in government revenue, and enabled real-time monitoring of service provision (Olaopa, 2021). Similarly, citizen engagement through digital channels has fostered greater accountability and responsiveness, bridging the gap between government actions and public expectations.

In sum, the relationship between governance, digital governance, and public service delivery in Nigeria can be conceptualized as a continuum: strong governance provides the framework for institutional accountability and policy implementation; digital governance acts as a transformative tool that modernizes administrative processes; and effective public service delivery represents the tangible outcome of this integration. This continuum underscores that technological adoption alone is insufficient; it must be embedded within robust governance structures, supported by institutional capacity, and complemented by inclusive policies to achieve meaningful improvements in service delivery.

Thus, understanding this linkage provides critical insights into the mechanisms through which digital governance reforms can enhance public sector performance, improve citizen welfare, and strengthen state legitimacy in Nigeria. This integrated perspective also highlights the need for ongoing research into the factors that mediate and moderate the effectiveness of digital governance in delivering equitable and high-quality public services.

2.2. Theoretical Framework

This study adopts a combined theoretical approach using the Technology-Organization-Environment (TOE) Framework **and** Good Governance Theory. These frameworks collectively explain how technological innovations, organizational capacity, environmental factors, and governance quality interact to influence public service outcomes.

Technology-Organization-Environment (TOE) Framework

The TOE framework, developed by Tornatzky and Fleischer (1990), is widely used in studies of technology adoption and digital transformation. It posits that the adoption and effective implementation of innovations are influenced by **three interrelated contexts**: technological, organizational, and environmental.

- **Technological context** refers to the characteristics and perceived benefits of digital technologies. In Nigeria, innovations such as e-government portals, biometric systems, and digital financial management platforms represent technologies capable of enhancing public service delivery (Mergel, Edelman, & Haug, 2019).
- **Organizational context** encompasses internal capabilities, including leadership support, institutional culture, technical expertise, and infrastructure readiness. The effectiveness of digital governance in Nigerian public agencies depends heavily on these organizational capacities (Olaopa, 2021).
- **Environmental context** captures external pressures and conditions such as regulatory frameworks, policy mandates, socio-economic factors, and citizen expectations. These factors



shape how digital governance initiatives are adopted and sustained (Janssen & van den Hoven, 2020).

Using the TOE framework, the study recognizes that the effectiveness of digital governance is determined not only by technology itself but also by organizational readiness and the external environment. This provides a holistic lens to understand how digital initiatives can influence efficiency, transparency, and citizen satisfaction in public service delivery.

Good Governance Theory

Good Governance Theory emphasizes that the quality of governance, measured in terms of accountability, transparency, responsiveness, rule of law, equity, and participation, is central to achieving effective public service delivery (World Bank, 2017; Pierre & Peters, 2020). While the TOE framework explains the determinants of technology adoption, Good Governance Theory highlights the normative and institutional conditions necessary for digital governance to improve service delivery outcomes.

In Nigeria, digital governance tools such as the Treasury Single Account (TSA) and digital tax portals enhance accountability and efficiency only if supported by strong institutional norms, ethical leadership, and citizen engagement (Ayo, 2022). This demonstrates that governance quality mediates the relationship between technological adoption and service delivery outcomes, ensuring that digital tools translate into tangible improvements for citizens.

The integration of TOE and Good Governance Theory provides a comprehensive framework for analyzing the impact of digital governance on public service delivery. The TOE framework identifies the determinants of technology adoption and organizational readiness, while Good Governance Theory elucidates the conditions under which these technologies yield meaningful improvements. Together, these theories allow the study to examine:

1. How technological innovations (digital platforms, e-government systems) influence service efficiency and accessibility.
2. How organizational capacity (skills, leadership, culture) affects the successful implementation of digital governance.
3. How environmental factors (regulations, policy, citizen expectations) shape the adoption and effectiveness of digital initiatives.
4. How governance quality mediates the relationship between digital governance adoption and public service delivery outcomes.

This combined theoretical lens provides a solid foundation for understanding the mechanisms through which digital governance reforms influence service delivery in Nigeria, highlighting the importance of both technological and institutional factors.



3.0. METHODOLOGY

This study adopts a mixed-methods approach, combining both quantitative and qualitative techniques to examine digital governance and public service delivery. A descriptive survey design was used for the quantitative aspect, while a qualitative approach provides deeper insights. The population comprises staff and students who utilize digital platforms within a selected institution. A sample size of 120 respondents is selected using simple random sampling, alongside 8 purposively selected interview participants. Data are collected through a structured questionnaire and interview guide. Quantitative data are analyzed using mean and standard deviation with a decision benchmark of 2.50, while qualitative data are analyzed thematically.

4.0. PRESENTATION OF RESULTS AND DISCUSSION

4.1. Presentation of Results

Research Question One: What is the influence of digital governance on public service delivery in Nigeria?

Table 4.1: Descriptive Analysis of the influence of digital governance on public service delivery

S/N	Questionnaire Items	SA	A	D	SD	Total	Mean	Decision
1	Digital governance has improved the efficiency of service delivery in Nigeria.	75	40	3	2	120	3.57	Accepted
		300	120	6	2	428		
2	The use of digital platforms has enhanced timely access to administrative and academic services in Nigeria.	66	49	4	1	120	3.5	Accepted
		264	147	8	1	420		
3	Digital governance has increased transparency in service delivery processes.	72	41	5	2	120	3.53	Accepted
		288	123	10	2	423		
4	The adoption of digital systems has improved overall user satisfaction with public services in Nigeria.	82	32	3	3	120	3.61	Accepted
		328	96	6	3	433		
Grand mean = $\frac{3.57+3.5+3.53+3.61}{4} = \frac{14.21}{4} = 3.52$								

From the above table, item 1 showed that digital governance has improved the efficiency of service delivery in Nigeria. Item 2 also revealed that the use of digital platforms has enhanced timely access to administrative and academic services in Nigeria. Item 3 equally showed that digital governance has increased transparency in service delivery processes. Additionally, item 4 revealed that the adoption of digital systems has improved overall user satisfaction with public services in Nigeria. The findings were revealed from the respondents mean scores on items 1, 2, 3 and 4 which showed 3.57, 3.5, 3.53 and 3.61, which are above 2.5 and were all accepted.

Research Question Two: How does governance quality affect the effectiveness of digital governance in service delivery in Nigeria?

**Table 4.2:** Descriptive Analysis of how Governance Quality Affect the Effectiveness of Digital Governance in Service Delivery in Nigeria

S/N	Questionnaire Items	SA	A	D	SD	Total	Mean	Decision
5	Accountability in institutional management enhances the effectiveness of digital governance in service delivery	68	47	3	2	120	3.50	Accepted
		272	141	6	2	421		
6	Transparency in administrative processes improves the performance of digital governance systems in the Nigeria.	90	24	4	2	120	3.55	Accepted
		100	30	8	2	135		
7	Strong institutional policies and regulations support the effective implementation of digital governance.	88	27	2	3	120	3.66	Accepted
		352	81	4	3	440		
8	Effective leadership and supervision improve the outcomes of digital governance in service delivery.	93	24	2	1	120	3.74	Accepted
		372	72	4	1	449		
Grand mean = $\frac{3.50+3.55+3.66+3.74}{4} = \frac{14.45}{4} = 3.62$								

Item 5 from the above table showed that accountability in institutional management enhances the effectiveness of digital governance in service delivery. Item 6 equally revealed that transparency in administrative processes improves the performance of digital governance systems in Nigeria. More so, item 7 revealed that Strong institutional policies and regulations support the effective implementation of digital governance. Item 8 also showed that Effective leadership and supervision improve the outcomes of digital governance in service delivery. These findings were revealed from the respondents mean scores of 3.50, 3.55, 3.66 and 3.74 respectively which are above 2.5 and were all accepted.

Research Question Three: What are the challenges affecting the implementation of digital governance in improving public service delivery in Nigeria?

Table 4.3 showing responses to the challenges affecting the implementation of digital governance in improving public service delivery in Nigeria.

S/N	Questionnaire Items	SA	A	D	SD	Total	Mean	Decision
9	Inadequate ICT infrastructure hinders the effective implementation of digital governance in Nigeria.	85	30	3	2	120	3.65	Accepted
		340	90	6	2	438		
10	Limited digital literacy among staff and students affects the use of digital governance platforms.	99	18	2	1	120	3.79	Accepted
		396	54	4	1	455		
11	Irregular power supply negatively impacts the effectiveness of digital governance systems.	23	11	2	2	120	3.44	Accepted
		92	33	4	2	131		
12	Resistance to change among staff affects the successful implementation of digital governance.	102	15	1	2	120	3.80	Accepted
		408	45	2	2	457		
Grand mean = $\frac{3.65+3.79+3.44+3.80}{4} = \frac{14.68}{4} = 3.67$								

The table above on item 9 revealed that inadequate ICT infrastructure hinders the effective implementation of digital governance in Nigeria. Item 10 revealed that limited digital literacy among



staff and students affects the use of digital governance platforms. Again, item 11 revealed that irregular power supply negatively impacts the effectiveness of digital governance systems. More so, item 12 also showed that resistance to change among staff affects the successful implementation of digital governance. This findings was revealed from the respondents on items 9,10,11 and 12 with mean scores 3.65, 3.79, 3.44 and 3.80 which are above 2.5 and were all accepted

4.2. Discussion of Key Challenges of Digital Governance and Public Service Delivery in Nigeria

Despite the growing adoption of digital governance as a reform strategy in Nigeria, its capacity to significantly transform public service delivery remains constrained by a range of structural, institutional, and technological challenges. These challenges not only limit the effectiveness of digital initiatives but also raise critical concerns about inclusiveness, sustainability, and governance outcomes (Mergel, Edelmann, & Haug, 2019; Ayo, 2022). One of the most prominent challenges is infrastructural inadequacy, particularly in relation to information and communication technology (ICT) facilities.

The effectiveness of digital governance is heavily dependent on reliable internet connectivity, stable electricity supply, and modern technological infrastructure. However, persistent issues such as erratic power supply and limited broadband penetration, especially in rural areas, significantly hinder the deployment and utilization of digital platforms (Olaopa, 2021). Closely related to this is the issue of the digital divide, which reflects inequalities in access to digital technologies across different socio-economic groups and geographical locations. A significant proportion of the Nigerian population lacks the necessary digital skills and technological resources to effectively engage with digital governance platforms, thereby limiting inclusiveness in service delivery (van Dijk, 2020).

Another critical challenge is institutional weakness and bureaucratic inertia. Many public institutions are characterized by rigid administrative structures, resistance to change, and limited technical capacity. The successful implementation of digital governance depends on organizational readiness and skilled personnel, which are often inadequate in developing contexts (Lindgren et al., 2019). Furthermore, corruption and lack of transparency continue to undermine the potential benefits of digital governance. Although digital systems are designed to reduce opportunities for corrupt practices, weak institutional enforcement mechanisms can limit their effectiveness (World Bank, 2017).

The issue of cybersecurity and data privacy also poses a significant challenge. As public sector operations become increasingly digitized, the risks of data breaches and cyber threats intensify, especially in contexts where regulatory frameworks and technical safeguards are still evolving (Janssen & van den Hoven, 2020). In addition, policy inconsistency and weak regulatory frameworks hinder the sustainability of digital governance initiatives. Frequent policy changes and lack of continuity in reform programmes create uncertainty and limit long-term effectiveness (Ayo, 2022).

Financial constraints further limit the successful implementation of digital governance. The deployment and maintenance of digital infrastructure require significant investment, which is often constrained by limited public sector funding and competing national priorities (Olaopa, 2021). Finally, limited citizen trust and engagement constitute a major challenge. Public confidence in digital



platforms is essential for their success; however, issues such as poor service quality, system failures, and low awareness reduce citizen participation (United Nations, 2020).

5.0. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

This study examined the relationship between digital governance and public service delivery in Nigeria, within the period 2010–2025. The findings underscore that digital governance has emerged as a critical instrument for reforming public sector administration by enhancing efficiency, transparency, and accessibility of services. The integration of information and communication technologies into administrative processes has significantly improved service delivery outcomes, particularly in areas such as timeliness, procedural efficiency, and user satisfaction.

However, the study also reveals that the effectiveness of digital governance is not automatic but is contingent upon the quality of governance structures and institutional capacity. While digital platforms have facilitated improvements in service delivery, challenges such as inadequate infrastructure, limited digital literacy, bureaucratic resistance, and weak policy implementation continue to constrain their full potential. These limitations highlight the persistent gap between technological adoption and optimal service delivery outcomes within the Nigerian public sector.

Furthermore, the study establishes that governance quality plays a mediating role in determining the success of digital governance initiatives. Without strong institutional frameworks characterized by accountability, transparency, and effective leadership, digital systems may fail to deliver their intended benefits. Thus, digital governance must be embedded within a broader framework of good governance to achieve sustainable impact. While digital governance has demonstrated significant potential in transforming public service delivery in Nigeria at large, its long-term effectiveness depends on sustained investment in infrastructure, institutional strengthening, and inclusive policy implementation. Addressing these challenges is essential for consolidating the gains of digital transformation and ensuring that public services are delivered efficiently, equitably, and responsively to meet the evolving needs of citizens.

5.2. Recommendations

This study makes the following recommendations:

1. The government and institutional authorities should develop and enforce robust regulatory frameworks to guide the implementation of digital governance. Clear policies on data protection, cybersecurity, and digital operations will enhance transparency, accountability, and trust in digital service delivery systems.
2. There is a need for sustained capital investment in ICT infrastructure, including reliable internet connectivity, modern digital platforms, and stable electricity supply. This will ensure the efficiency, accessibility, and sustainability of digital governance initiatives across Nigerian public service settings.



3. Continuous training programmes should be organized for staff and students to improve digital skills and competencies. Enhancing digital literacy will promote effective utilization of digital platforms and reduce resistance to technological change.

4. Institutional leadership should demonstrate strong commitment to digital transformation by fostering a culture of innovation, accountability, and efficiency. Administrative structures should be reformed to support the effective implementation and monitoring of digital governance initiatives.

5. Efforts should be made to ensure inclusive access to digital services by addressing disparities in access to technology. This includes providing affordable internet services, expanding ICT facilities, and supporting underserved groups within the institution and the broader society.

6. Robust cybersecurity systems should be established to safeguard digital platforms from threats and data breaches. This will strengthen user confidence and ensure the integrity and reliability of digital governance systems.

Conflict of Interest

The authors declare that no conflict of interest exist in this manuscript

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