EVALUATING THE IMPACT OF E-GOVERNANCE ON PUBLIC SERVICE DELIVERY IN NIGERIA: A STUDY OF THE EDO STATE GOVERNMENT (2016-2024)

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF PUBLIC ADMINISTRATION, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (BSc) DEGREE IN PUBLIC ADMINISTRATION

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CERTIFICATION

We, the undersigned certify that this project titled "Evaluating the Impact of E-Governance on Public Service Delivery in Nigeria: A Study of the Edo State Government (2016–2024)" was carried out by GOODNESS ERUMUSELE ISIRAMEN with matriculation number SSC2105818 of the Department of Public Administration in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc) in Public Administration, University of Benin.

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DATE	**DATE**

DEDICATION

This work is dedicated to God Almighty.

I also dedicate this to my parents, Mr and Mrs Isiramen and my siblings.

ACKNOWLEDGEMENTS

I give all glory and honor to God Almighty, the source of wisdom, knowledge, strength, inspiration, and understanding, for seeing me through the completion of this project.

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ABSTRACT

This study evaluates the impact of e-governance on public service delivery in Nigeria, with specific focus on the Edo State Government from 2016 to 2024. The study examines how the adoption of digital governance platforms has influenced administrative efficiency, transparency, accountability, and citizen engagement in service delivery. Data were obtained from both primary and secondary sources, including structured interviews and government publications. The study adopts a descriptive and qualitative approach, analyzing respondents' perspectives across two main categories — civil servants and non-civil servants — to assess the practical implications of e-governance initiatives. Findings revealed that the integration of e-governance tools, such as the EdoBEST education reform platform, online payment systems, and digital civil service management processes, has enhanced efficiency and accessibility in public service delivery. However, challenges such as poor internet infrastructure, limited digital literacy, and policy inconsistency still affect optimal implementation. The study recommends among others that government should improve internet connectivity and upgrade digital infrastructure, provide staff with continuous ICT training, as well as promote public awareness and inclusiveness in strengthening e-service delivery.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Governance in the 21st century has increasingly adopted modern technologies to improve efficiency, accountability, and transparency in delivering public services. This shift, often termed e-governance, integrates information and communication technology (ICT) into governmental operations to enhance interactions among the state, citizens, and various stakeholders (Heeks, 2006). E-governance goes beyond merely digitalizing existing governmental processes; it involves reconfiguring administrative systems, improving service access, and encouraging citizen engagement in governance (United Nations, 2020).

In developing nations like Nigeria, governance has traditionally suffered from inefficiencies, bureaucratic obstacles, corruption, and limited institutional capacity, significantly hindering service delivery (Ojo, 2014). To tackle these issues, various levels of Nigerian government have turned to ICT-driven reforms, particularly since returning to democratic governance in 1999 (Adejumo, 2017). The federal government's National e-Government Strategy (NeGSt) and the establishment of the National Information Technology Development Agency (NITDA) have been crucial in laying the groundwork for ICT integration in governance (NITDA, 2019).

Under the administration of Governor Godwin Obaseki (2016–2024), Edo State has become a forerunner among Nigerian sub-national governments in implementing e-governance to transform public services. The state has launched reforms such as the Edo State Civil Service Transformation and the EdoBEST (Edo Basic Education Sector Transformation) program, which utilize ICT tools for data-informed planning, teacher training, and classroom management (World Bank, 2021). These initiatives aim to enhance educational quality and reinforce institutional accountability. Additionally, Edo State has adopted digital platforms for payroll management, pension administration, land registration, and tax collection, thus minimizing revenue losses and boosting service efficiency (Edo State Government, 2022).

Despite these advancements, the overall impact of e-governance on public service delivery in Nigeria is still debated. While some research indicates that ICT tools foster transparency, accountability, and citizen satisfaction (Adebisi & Oni, 2019), others claim that infrastructural deficiencies, digital illiteracy, and resistance to change hinder the effectiveness of e-governance initiatives (Okot-Uma, 2018). In Edo State, although significant progress has been made, challenges such as inconsistent internet connectivity, inadequate ICT infrastructure, and political interference continue to exist (Osazee-Ogbeide, 2021). Therefore, it is both timely and necessary to evaluate

how much e-governance has improved public service delivery in Edo State from 2016 to 2024.

1.2 Statement of the Problem

Public service delivery in Nigeria has frequently faced issues of inefficiency, corruption, and lack of accountability. Citizens often face delays in accessing services, cumbersome bureaucratic procedures, and bear the costs associated with inefficiencies (Ejumudo, 2013). The expectation was that e-governance would alleviate these issues by utilizing ICT to streamline operations, combat corruption, and promote transparency (Heeks, 2008). However, despite significant investments and policy declarations, results from e-governance initiatives across Nigeria remain inconsistent.

In Edo State, the implementation of ICT-driven reforms was expected to deliver significant enhancements in service delivery, particularly in education, civil service management, and financial management. However, anecdotal evidence and preliminary studies indicate a disparity between expectations and actual results. While initiatives like EdoBEST have received international acclaim, there remains limited scholarly evaluation of their overall impact on service delivery (World Bank, 2021). Additionally, infrastructural challenges, resistance from established bureaucratic interests, and limited digital literacy among citizens continue to impede the effectiveness of e-governance (Omoregie, 2022). Consequently, the core challenge is to critically assess whether the e-governance reforms in Edo State from 2016 to 2024

have meaningfully enhanced public service delivery and how well they have addressed the systemic obstacles that have historically affected governance in Nigeria.

1.3 Objective of the Study

This study aims to evaluate the effects of e-governance on public service delivery in Edo State from 2016 to 2024. Specifically, the objectives are to:

1. Investigate the nature and range of e-governance reforms enacted in Edo State.
2. Determine how much e-governance has improved efficiency, transparency, and accountability in public service delivery.
3. Identify challenges and limitations obstructing the effective implementation of e-governance in Edo State.

1.4 Research Questions/Hypotheses

This study is guided by the following research questions:

1. To what degree has e-governance enhanced efficiency and transparency in public service delivery?
2. How has e-governance affected civil service management in Edo State?
3. What obstacles have limited the effectiveness of e-governance initiatives?
4. What strategies can be implemented to enhance e-governance for better public service delivery?

Research Hypotheses:

H_0: E-governance reforms have not significantly improved public service delivery in Edo State between 2016 and 2024.

H1: E-governance reforms have significantly improved public service delivery in Edo State between 2016 and 2024.

1.5 Significance of the Study

This study is essential for multiple reasons. Academically, it adds to the expanding body of literature on e-governance in Nigeria by providing an empirical evaluation of its effects at a subnational level. It helps bridge the gap between theoretical expectations of e-governance and its practical implications in Edo State.

Practically, the findings will offer insights to policymakers in Edo State and across Nigeria regarding the successes and limitations of ICT-driven governance reforms. By pinpointing key challenges, the study will present policy recommendations that can aid future reforms and enhance public service delivery. For civil servants and administrators, the results will illuminate areas necessitating capacity building and infrastructural investments to optimize the benefits of e-governance.

For citizens, particularly in Edo State, this research will assess whether digital governance has led to meaningful improvements in their access to and satisfaction with government services.

More broadly, the findings may serve as a blueprint for other sub-national governments in Nigeria and Africa aiming to utilize technology for enhanced governance.

1.6 Scope of the Study

This study focuses on evaluating E-Governance reforms in Edo state from 2016 to 2024.The research concentrates solely on the Edo State Civil Service from 2016 to 2024, highlighting the extensive e-governance reforms initiated under Governor Godwin Obaseki's administration. As the enduring administrative framework of government, the civil service is pivotal in formulating and executing policies as well as providing crucial public services.

The investigation encompasses all ministries, departments, and agencies (MDAs) within the Edo State Government affected by the state's digital transformation efforts. It looks into significant reforms such as the digitization of payroll and human resource management, e-procurement systems, financial management innovations, and electronic record-keeping initiatives. Programs like EdoBEST are examined within the broader context of civil service modernization, illustrating the civil service's role in delivering education and other vital services.

Geographically, the research is confined to Edo State, Nigeria, excluding federal or civil service structures from other states. Temporally, it covers the entire

period of Governor Obaseki's administration, from 2016 to 2024, during which the most impactful e-governance reforms were developed and implemented.

Conceptually, the study aims to understand the nature and execution of e-governance reforms within the civil service, evaluating their effects on efficiency, transparency, and accountability in public service delivery, while also identifying the challenges and obstacles to their complete implementation. Additionally, it examines the sustainability of these reforms and their capacity to enhance institutional strength beyond the current administration.

This methodology guarantees a structured analysis of institutional reforms, capacity building, and systemic changes within the administrative framework of the Edo State Government.

1.7 Definition of Terms

E-Governance: The application of information and communication technology (ICT) by government entities to deliver services, share information, and communicate with citizens, businesses, and other governmental branches (UN, 2020).

Public Service Delivery: The processes and outcomes involved in providing governmental services such as education, healthcare, taxation, and civil administration to citizens (Grindle, 1997).

ICT (Information and Communication Technology): A comprehensive term that includes digital tools like computers, mobile devices, the internet, and associated software used in governance and service delivery (Castells, 2010).

Transparency: The extent to which government processes, decisions, and actions are open and available for public scrutiny (Bovens, 2007).

Accountability: The duty of public officials to explain their actions and decisions to stakeholders and to face consequences for failures or misconduct (Schedler, 1999).

Civil Service: The enduring administrative sector of the government tasked with executing policies and providing services via Ministerial Departments and Agencies (MDAs).

Digital Transformation: The thorough incorporation of technology into civil service functions to supplant manual methods, boost efficiency, and improve service provision.

Institutional Reform: Intentional reorganization and enhancement of governmental systems and processes to elevate performance and responsiveness, frequently aided by digital technologies.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Literature Review

2.1.1 Conceptual Clarifications

E-governance, also referred to as electronic governance, has emerged as one of the most significant reforms in modern public administration. According to the United Nations (2022), e-governance refers to the use of information and communication technologies (ICTs) by government institutions to provide services, share information, and foster interaction with citizens, businesses, and other arms of government. The core idea is that governance processes become more transparent, accountable and efficient when digitally enabled. In other words, e-governance is not merely about digitizing government processes, but about transforming governance to become more citizen-centric, perticipatory, and effective (Heeks, 2006; Dutta & Mia, 2021).

Concept of E-Governance

The concept of e-governance encompasses more than just automating government functions and operations; it involves reimagining governance frameworks to utilize ICTs for improved decision-making, accountability, and citizen participation (Fountain, 2001). The UN (2022) emphasizes that e-governance must contribute to inclusivity, sustainability, and resilience within public institutions. In developing countries like Nigeria, the move toward e-governance is seen as crucial for bridging

the gap between governments and their citizens, enhancing timely service delivery and reducing bureaucratic inefficiencies.

Heeks (2006) provides a model for understanding the stages of e-governance implementation, which include presence, interaction, transaction, and transformation. Many states in Nigeria, such as Edo State, are progressing from the interaction phase to the transaction phase, enabling online processes for government services such as tax filing, fee payments, and business registration.

Dimensions of E-Governance

E-governance operates through several essential dimensions:

Government-to-Citizen (G2C): Improving direct service delivery and engagement through online platforms, e-education, e-health, and feedback systems.

Government-to-Business (G2B): Streamlining transactions like licensing, tax submissions, and regulatory compliance.

Government-to-Government (G2G): Enhancing inter-agency communication and data sharing.

Government-to-Employee (G2E): Automating internal processes, including payroll and records management.

Public Service Delivery

Public service delivery is central to governance. It refers to the provision of goods and services such as healthcare, education, and infrastructure, security, and

administrative services by government institutions to citizens (Grindle, 1997). Effective service delivery is often used as a benchmark for accessing governance performance. However, In many developing countries like Nigeria, public service delivery has historically been characterized by inefficiencies, corruption, bureaucratic red tape, corruption and lack of accountability (Akinwale, 2020). E-governance presents a potential remedy by simplifying processes and reducing direct human interaction, thus limiting opportunities for corrupt practices.

Tools associated with e-governance—such as e-portals, mobile applications, and integrated databases—can significantly enhance the responsiveness of government institutions. For instance, the e-governance reforms in Edo State under the EdoBEST program have improved teacher oversight, improved payroll management, and enabled data-driven decision making in education. Additionally, digitizing civil service records has minimized redundancy and accelerated processing times for promotions and pensions (BPSR, 2021).

Governance and Good Governance

Rhodes (1996) defines governance as the processes and structures that oversee political and administrative authority in managing resources and implementing policies. Good governance, as explained by the World Bank (1992), is characterized by transparency, accountability, participation, responsiveness, consensus-building, and adherence to the rule of law. In Nigeria, successive governments have linked public

sector reforms to achieving good governance, particularly through reforms using ICT to enhance accountability and combat corruption (Eme & Emeh, 2012).

The theory of good governance supports the case for e-governance by emphasizing the significance of public trust and institutional integrity in governance. By establishing digital platforms for feedback and complaints, governments can foster participatory governance and ensure that policies align with the needs of citizens.

ICT and the Civil Service

The civil service is the means by which government policies are executed. It plays a crucial role in delivering public services and is essential for the success of governance reforms. The incorporation of ICT into the civil service transforms it into what Fountain (2001) calls a "virtual state," where administrative tasks are conducted through interoperable digital systems rather than physical paperwork.

Historically, Nigeria's civil service has been viewed as ineffective and excessively bureaucratic. However, reforms such as the implementation of the Integrated Payroll and Personnel Information System (IPPIS), the Government Integrated Financial Management Information System (GIFMIS), and the Treasury Single Account (TSA) have significantly reduced ghost workers, improved fiscal transparency, and enhanced the efficiency of wage disbursement. These initiatives rely on robust ICT infrastructure and mark significant strides toward full e-governance (NITDA, 2023).

Nigerian Experience with E-Governance

Many Nigerian states have adopted e-governance initiatives with varying success rates. Edo State, Lagos State, and Kaduna State have made notable advancements in developing online platforms for tax collection, public procurement, and service requests. These reforms have resulted in increased internally generated revenue (IGR) and enhanced service delivery indicators.

State, Key Initiative and Outcomes

Edo: EdoBEST digital education reform; e-civil service records -- Enhanced teacher attendance and payroll efficiency

Lagos: LASG e-Procurement Portal, Land Use Charge portal-- Improved procurement transparency, higher revenue collection

Kaduna: Digital citizen feedback app, GIS-based land registration-- Quicker land processing, diminished corruption

This overview highlights that e-governance does not conform to a one-size-fit-all/universal model; its success depends on political determination, infrastructure, financing, and capacity-building for civil servants.

Policy and Regulatory Frameworks

The e-governance strategy in Nigeria is guided by several institutional frameworks, including the Nigeria e-Government Master Plan (2020), the National Digital Economy Policy and Strategy (2020–2030), and the Nigeria Data Protection

Act (2023). The Bureau of Public Service Reforms (BPSR) is leading efforts to integrate ICT initiatives into governance frameworks.

In summary, e-governance represents a transformative approach to governance rooted in principles of transparency, accountability, and citizen focus. This, In Nigeria's context, particularly within the civil service, e-governance is positioned as a reform mechanism intended to close the gap between government and citizens. By digitizing administrative workflows, governments can enhance service delivery, diminish corruption, and build greater public trust in governance. The experience of Edo State illustrates how subnational governments can employ technology to effect systemic change.

2.1.2 Global Perspectives on E-Governance and Service Delivery

Globally, e-governance has been embraced as a tool to promote efficient, transparent, and accountable public administration. The United Nations E-Government Survey (2022) ranks countries such as Denmark, Finland, South Korea, and Estonia as global leaders in e-governance adoption. Estonia, for example, has become a case study in how digital governance can transform service delivery. Almost all public services in Estonia are accessible online, including voting, tax filing, business registration, and health services (Madise & Martens, 2006). This comprehensive adoption has not only improved efficiency but also strengthened trust between government and citizens.

South Korea has similarly been recognized as a global model. The country's integrated e-government system has allowed for real-time information sharing across ministries, drastically reducing bureaucratic delays. Kim (2010) notes that Korea's model demonstrates the potential of ICT-enabled governance to enhance citizen satisfaction and reduce operational costs.

In developed democracies, e-governance is also closely linked with participatory governance. For instance, in the United States, open government initiatives have promoted transparency by making government data publicly accessible (Janssen et al., 2012). In the United Kingdom, digital inclusion strategies have sought to ensure that citizens from all socio-economic backgrounds can access online services (Margetts & Dunleavy, 2013).

Beyond efficiency, the global literature shows that e-governance also enhances inclusivity. For example, India's Aadhaar system, the world's largest biometric identification program, has enabled millions of citizens to access social welfare services directly, reducing leakages and corruption (Bhatnagar, 2014). However, it has also raised concerns regarding data privacy and exclusion of vulnerable populations.

The global evidence suggests that while e-governance can enhance service delivery, its success depends on the availability of infrastructure, digital literacy, political will, and appropriate legal frameworks (United Nations, 2022). These factors become even more critical in developing regions like Africa.

2.1.3 E-Governance in Africa

African countries have made notable progress in adopting e-governance. Rwanda, for instance, is widely regarded as one of Africa's success stories. Through its Vision 2020 program and the Irembo digital platform, the Rwandan government has digitized hundreds of public services, enabling citizens to access government documents, register businesses, and make payments online (Ndemo & Weiss, 2017). The success of Rwanda's initiative lies in its strong political leadership and investment in ICT infrastructure.

South Africa has also made progress, particularly in digital service delivery and e-participation. The South African government's e-government strategy emphasizes citizen-centric services and has been integrated with mobile platforms to increase accessibility, given the widespread use of mobile technology (Mawela, 2017). However, digital inequality remains a challenge, with rural populations less likely to benefit from e-services.

Kenya has implemented ICT-driven governance reforms, including the eCitizen portal that centralizes government services online. Additionally, the country's mobile money innovation, M-Pesa, has been integrated into government payment systems, making transactions more efficient and reducing opportunities for corruption (Oyugi, 2018).

Nevertheless, across Africa, the literature identifies persistent challenges including poor ICT infrastructure, high costs of internet access, limited digital literacy, and weak institutional capacity (Mutula & Mostert, 2010). Furthermore, political resistance and corruption can undermine e-governance adoption. Despite these challenges, international agencies such as the World Bank and African Development Bank continue to support e-governance projects in Africa, recognizing their transformative potential.

2.1.4 E-Governance in Nigeria

Nigeria has made significant progress in adopting e-governance, though implementation has been inconsistent. Efforts began in the early 2000s with the launch of the National Information Technology Policy (2001), followed by the establishment of NITDA. More recently, the Nigeria E-Government Master Plan (2020) has sought to consolidate ICT initiatives across ministries, departments, and agencies (BPSR, 2021).

At the federal level, the Treasury Single Account (TSA) is often cited as one of Nigeria's most successful e-governance reforms. By consolidating government accounts into a single system, TSA has reduced financial leakages and improved financial accountability (Agbo & Ochei, 2021). Similarly, the Integrated Payroll and Personnel Information System (IPPIS) has addressed issues of ghost workers in the public sector.

In terms of service delivery, Nigeria has introduced platforms such as the Corporate Affairs Commission (CAC) online registration portal and the National Identity Management Commission's (NIMC) digital ID initiative. However, these programs face challenges including poor infrastructure, weak inter-agency coordination, and resistance from vested interests (Eme & Chikodiri, 2015).

The digital divide is another significant barrier. According to the Nigerian Communications Commission (2023), internet penetration in Nigeria stands at around 50%, meaning that a substantial portion of the population remains excluded from digital services. Moreover, the lack of consistent policy implementation often undermines reform efforts.

2.1.5 E-Governance in Edo State (2016–2024)

Edo State stands out as a subnational model of e-governance in Nigeria, particularly within the civil service. From 2016 to 2024, there were concerted efforts aimed at enhancing public service delivery through the integration of digital technologies and innovative processes. This aligns with the primary aim of this research project, which focuses on evaluating the impact of e-governance on public service delivery.

2.1.5.1 Civil Service Digital Transformation

Between 2016 and 2024, modernizing the civil service structure was a key focus for the Edo State Government. An Enterprise Resource Planning (ERP) system

was introduced to optimize human resource management, payroll, and performance monitoring (Nigerian Observer, 2023). This initiative reduced instances of ghost workers, improved payroll efficiency, and fostered accountability within various ministries, departments, and agencies (MDAs). The digitization of employee records facilitated data-informed decision-making and enhanced workforce management (Obaseki & Ogiemwonyi, 2022).

2.1.5.2 E-Procurement and Fiscal Transparency

Edo State implemented an e-procurement platform following the Open Contracting Data Standards (OCDS), enhancing the transparency and competitiveness of procurement processes (Open Contracting Partnership, 2022). This change helped to minimize public fund leakages, fostered fair competition among contractors, and built citizens' trust in government. Additionally, the state launched an online budget portal, providing public access to fiscal information and allowing citizens and civil society groups to track budget execution in real-time (BudgIT, 2023).

2.1.5.3 Education Sector Digital Reform (EdoBEST)

Although primarily focused on education, the Edo Basic Education Sector Transformation (EdoBEST) initiative significantly enhanced public service delivery by digitizing administrative functions in the education sector. Teachers received tablets with preloaded lesson plans, and head teachers utilized digital dashboards to monitor attendance and educational outcomes (World Bank, 2020). This example

illustrates how digital governance in the civil service can lead to increased efficiency and better service results.

2.1.5.4 Judicial and Administrative Innovations

During this period, e-filing systems were introduced in the state judiciary, allowing lawyers and litigants to file cases online, which decreased delays and improved efficiency (Premium Times, 2023). Additionally, Edo State launched a citizen service portal, enabling residents to access governmental services, submit applications, and file complaints without having to visit government offices in person (Edo State Government, 2023).

2.1.5.5 ICT Infrastructure and Sustainability Measures

The state invested in ICT infrastructure, which included providing broadband connectivity to MDAs, training civil servants in digital skills, and enhancing cybersecurity measures (TechCabal, 2023). These investments were crucial for maintaining digital reforms and ensuring uninterrupted service delivery.

2.1.5.6 Outcomes on Public Service Delivery

Overall, these reforms resulted in increased efficiency, transparency, and accountability within Edo State's public services. Instances of payroll fraud were significantly reduced, procurement processes became more competitive, and access to services for citizens improved (BPSR, 2024). Moreover, the state's emphasis on data

transparency encouraged greater civic engagement and oversight, strengthening public trust.

2.1.5.7 Continuity under Governor Okpebholo (2024–Date)

While this study primarily addresses the 2016–2024 period, early observations indicate that the new administration has continued the reform momentum by emphasizing the consolidation of ICT infrastructure and the institutionalization of digital governance practices (Nigerian Observer, 2024). This continuity is vital for maintaining the progress achieved in the previous administration.

2.1.6 Challenges of E-Governance Implementation in Nigeria

Despite notable progress, e-governance in Nigeria faces a number of persistent challenges. These challenges are complex and span across infrastructure, policy, socio-economic factors, and security concerns.

1. Infrastructure Deficiencies:

A major obstacle to effective e-governance in Nigeria is the lack of adequate ICT infrastructure. Many regions, particularly rural areas, suffer from unreliable electricity, poor broadband internet access, and limited telecommunications coverage, all of which are essential for accessing and utilizing digital government services (NITDA, 2021). This disparity means that while urban residents may benefit from e-services, those in rural communities are often left out. Additionally, the high cost of

internet data and insufficient investment in last-mile connectivity further hinder the adoption of e-governance nationwide.

2. Digital Divide:

Closely related to infrastructure issues is the digital divide. Socio-economic inequalities result in a large segment of the Nigerian population lacking necessary devices—such as smartphones, computers, or tablets—as well as the digital literacy required to effectively navigate online platforms (Akinwale, 2020). This digital gap particularly affects marginalized groups, including women, the elderly, and low-income individuals, restricting their engagement in digital governance. Without targeted efforts to enhance digital inclusion through training and subsidized access, e-governance could reinforce existing social disparities.

3. Policy Instability:

Frequent shifts in government policies and a lack of continuity between different administrations often disrupt e-governance initiatives (Eme & Chikodiri, 2015). Projects initiated by one administration are sometimes abandoned or overhauled by a successor, leading to wasted resources and lost momentum. Additionally, weak regulatory frameworks and ineffective enforcement make it challenging to institutionalize reforms, resulting in inconsistent implementation across government levels. This policy inconsistency erodes investor confidence and hinders public sector innovation.

4. Corruption and Resistance to Change:

E-governance reforms aim to enhance transparency and limit corruption by automating processes and minimizing human intervention. However, this very characteristic can provoke pushback from individuals or groups who benefit from the faults of traditional manual systems (Olaopa, 2014). Some public officials might intentionally obstruct or delay the introduction of digital systems due to fears of losing lucrative opportunities. Moreover, institutional inertia can also occur, with employees unmotivated to change due to ineffective change management strategies and inadequate training.

5. Cybersecurity Threats:

As Nigeria moves toward greater digitization of government services, the risks of cyberattacks, data breaches, and hacking become increasingly significant. If citizens' sensitive personal and financial information is not properly secured, it may undermine trust in e-governance platforms (Nigeria Data Protection Act, 2023). Furthermore, many government agencies still lack strong cybersecurity frameworks, routine vulnerability assessments, and trained personnel, which leaves systems vulnerable to exploitation. The financial and reputational costs of dealing with cyber incidents can be substantial.

In summary, effectively addressing these challenges is essential for the success of e-governance in Nigeria. Without robust infrastructure, inclusive digital literacy

initiatives, stable policy frameworks, and strong cybersecurity measures, the full benefits of e-governance cannot be achieved. Tackling issues of corruption and resistance to change also necessitates a strong political commitment, effective change management, and active engagement with stakeholders. By systematically overcoming these barriers, Nigeria can foster a more efficient, transparent, and citizen-focused governance system that utilizes technology to enhance public service delivery and support national development.

2.1.7 Opportunities and Future Directions

Despite these challenges, opportunities for advancing e-governance in Nigeria remain strong. The growth of mobile phone penetration, increasing internet access, and expanding digital literacy programs provide a foundation for scaling up e-services. The Nigeria Startup Act (2022) and the Data Protection Act (2023) also provide enabling legal frameworks for digital transformation.

For Edo State, continued investment in ICT infrastructure, capacity building for civil servants, and citizen engagement platforms are essential for sustaining progress. The expansion of e-learning platforms under EdoBEST and the adoption of smart technologies in urban management could further consolidate Edo's role as a subnational leader in e-governance.

2.2 Theoretical Framework

A theoretical framework provides the conceptual lens for understanding the impact of e-governance on public service delivery. This study adopts two main theories: the Technology Acceptance Model (TAM) and Good Governance Theory. These theories jointly explain the factors influencing technology adoption among stakeholders, along with the normative expectations regarding governance outcomes in the public sector.

2.2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), introduced by Davis in 1989, aims to explain and predict how users accept information systems. TAM is adapted from Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) though it is specifically designed for the context of technology adoption. According to Davis, user acceptance relies primarily on two key constructs:

Perceived Usefulness (PU): The extent to which an individual believes using a specific system will improve their job performance.

Perceived Ease of Use (PEOU): The extent to which a person believes that utilizing a system will require minimal effort.

These constructs affect users' Attitude Toward Using (ATU), which in turn guides their Behavioral Intention to Use (BI) and eventually their Actual System Use

(Venkatesh & Davis, 2000). Furthermore, PEOU directly influences PU, suggesting that easier systems are often seen as more useful.

TAM has been thoroughly validated in various fields, including e-commerce, e-learning, e-governance, and public administration (Venkatesh & Bala, 2008; King & He, 2006). Its strengths lie in its simplicity, predictive effectiveness, and adaptability to various technological settings. In the realm of e-governance, TAM is particularly significant as it offers a solid framework for understanding how citizens, civil servants, and other stakeholders engage with digital governance platforms.

In this research, TAM is utilized to evaluate how perceived usefulness and ease of use of the Edo State Government's e-governance platforms affect stakeholders' intentions to use them and their actual usage behaviors. This assessment aims to pinpoint obstacles to adoption and enhance user experience for better service delivery.

2.2.3 Good Governance Theory

Good Governance Theory serves as a normative and evaluative framework for analyzing the success of public sector reforms. The concept gained traction in international development discussions, particularly through institutions like the World Bank (1992) and the United Nations Development Programme (UNDP, 1997). Good governance is generally defined as the decision-making process and how those decisions are executed (or not) in a transparent, accountable, participatory, equitable, and responsive manner (Kaufmann, Kraay & Zoido-Lobatón, 1999)

Key principles of good governance identified by scholars include:

Accountability: Ensuring public officials are responsible for their actions and decisions.

Transparency: Making government processes accessible and open to citizens.

Rule of Law: Fair and impartial enforcement of legal frameworks.

Participation: Allowing citizens and stakeholders a voice in governance.

Effectiveness and Efficiency: Timely service delivery and responsible resource management (Gisselquist, 2012).

Good Governance Theory asserts that the legitimacy and effectiveness of government institutions depend on the adherence to these principles. In this study, it provides the evaluative criteria to determine whether the adoption of e-governance in Edo State enhances transparency, accountability, responsiveness, and service delivery.

2.2.5 Justification of Theories Used

The combination of TAM and Good Governance Theory provides a thorough framework for evaluating the impact of e-governance on public service delivery. While TAM focuses on the behavioral and perceptual factors affecting e-governance adoption (a micro-level analysis), Good Governance Theory contextualizes this adoption within the larger institutional and normative expectations of governance (a macro-level analysis). Together, they offer insights into both the factors driving e-governance usage and its effects on public service delivery.

In essence, this study not only explores whether citizens and civil servants are inclined to adopt e-governance platforms (TAM) but also assesses whether such adoption fosters accountability, transparency, efficiency, and participation (Good Governance Theory). This dual-theory approach aligns with recent literature advocating the fusion of behavioral models and governance frameworks for more comprehensive evaluations of e-government initiatives (Heeks, 2021; Dwivedi et al., 2017).

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Research Methodology

This chapter outlines the methodology employed in evaluating the impact of e-governance on public service delivery in Edo State between 2016 and 2024. Methodology is a critical aspect of any academic inquiry, as it specifies the procedures and strategies adopted to collect, analyze, and interpret data in order to answer research questions (Creswell & Plano Clark, 2018). In this study, a mixed-method design was adopted, combining both quantitative and qualitative approaches. This choice was informed by the need to capture not only the measurable patterns of e-governance adoption but also the nuanced experiences and perceptions of stakeholders within the Edo State context.

3.1 Research Design

The research design refers to the overall plan that guides the process of collecting and analyzing data (Kothari, 2014). For this study, a mixed-method research design was utilized, with greater emphasis on the qualitative dimension. The rationale behind this choice is that e-governance impacts are both measurable and experiential.

On the one hand, the quantitative approach (through close-ended questionnaire items) enabled the researcher to generate statistical data on the extent of adoption, accessibility, and efficiency of e-governance platforms in Edo State. Also, the

qualitative approach (through open-ended questions) facilitated deeper exploration of citizens', teachers', and civil servants' perceptions, attitudes, and lived experiences regarding e-governance implementation.

This design ensures triangulation, which strengthens the validity and reliability of findings by capturing diverse perspectives (Creswell, 2014; Bryman, 2016). It is especially appropriate for public administration research where both numerical evidence and descriptive insights are essential in understanding governance outcomes.

3.2 Population of the Study

According to Nworgu (2015), the population of a study refers to the total set of individuals, objects, or events to which the researcher intends to generalize findings. In this research, the population consists of two primary categories of stakeholders involved in the implementation and use of e-governance systems in Edo State from 2016 to 2024:

1. **Civil Servants**– This group comprises teachers participating in the EdoBEST program (who benefit from digital educational reforms in the state) as well as employees from selected ministries, departments, and agencies (MDAs), including the Edo State Internal Revenue Service (EIRS), Ministry of Education, and Ministry of Health. These participants act as policy implementers and public service providers who engage with e-governance systems as part of their official responsibilities.

2. **Non-Civil Servants** – This group includes business owners, private-sector workers, and residents of Edo State who utilize e-governance platforms such as tax portals, educational services, health information systems, and online service request channels. They represent the ultimate users and beneficiaries of public services.

These categories were selected to ensure a comprehensive perspective on e-governance, representing both the views of government actors (the supply side) and the service users (the demand side).

3.3 Sampling Techniques

Sampling refers to the process of selecting a portion of the population to represent the whole (Saunders, Lewis & Thornhill, 2019). For this study, a purposive sampling technique was adopted to select respondents who had direct experience with e-governance platforms in Edo State. This technique is effective as it focuses on individuals who can provide valuable insights.

Additionally, stratified sampling was used to ensure proportional representation of the two primary groups—civil servants and non-civil servants. For the civil servants' group, respondents were selected from various Ministries, Departments, and Agencies (MDAs) and schools associated with the EdoBEST initiative to incorporate a diversity of viewpoints.

The combination of purposive and stratified sampling reduced bias, captured a broad spectrum of experiences, and improved the reliability of the results.

3.4 Sample Size

For this study, a total of 150 respondents were selected, distributed as follows:

75 civil servants (comprising 40 teachers involved in EdoBEST and 35 individuals from key ministries and agencies such as EIRS, the Ministry of Education, and the Ministry of Health)

75 non-civil servants (including business owners, private sector employees, and other residents of Edo State who have utilized e-governance services)

The selection of this sample size is supported by several reasons:

1. **Balanced Representation:** The equal division between civil servants and non-civil servants allows the study to address both the implementation and usage aspects of e-governance.
2. **Robust Insights:** A sample size of 150 provides enough data to identify significant patterns and trends while remaining manageable for qualitative-focused analysis (Guest, Namey & Chen, 2020).
3. **Improved Reliability:** Including diverse subgroups within civil servants (teachers and agency personnel) enhances the ability to compare experiences across various public-sector roles.

4. **Statistical Confidence:** A larger sample size yields more reliable descriptive statistics (such as percentages and frequencies), reducing the influence of outliers and random discrepancies.

This distribution facilitates a thorough evaluation of e-governance implementation in Edo State from both supply and demand perspectives.

3.5 Sources of Data

Data were obtained from primary sources. According to Orodho (2012), primary sources provide first-hand information that is most reliable for empirical investigation. In this study, the primary sources consisted of questionnaires distributed to selected respondents across the three stakeholder groups. Both close-ended items (to generate quantifiable responses) and open-ended items (to elicit detailed explanations) were included.

Secondary sources such as government policy documents, journal articles, and reports from the Edo State Ministry of Education and Ministry of Digital Economy and Science were also consulted to complement primary data and provide contextual depth.

3.6 Instrument of Data Collection

The main instrument of data collection was a structured questionnaire. The questionnaire was divided into two sections:

Section A: Contained close-ended questions using Likert scales and multiple-choice formats. These were designed to capture quantifiable data on respondents' access to, usage of, and satisfaction with e-governance platforms.

Section B: Consisted of open-ended questions, allowing respondents to narrate their experiences, challenges, and recommendations regarding e-governance in Edo State.

The use of questionnaires was deemed suitable because it is cost-effective, ensures uniformity of questions across respondents, and provides both measurable and narrative data (Dillman, Smyth & Christian, 2014).

3.7 Techniques of Data Analysis

The analysis of collected data was conducted using a twofold approach consistent with the mixed-method design:

1. **Quantitative Analysis:** Data from close-ended items were coded and analyzed using descriptive statistics (percentages, frequencies, and charts). This provided an overview of the patterns of e-governance adoption and user satisfaction among respondents.
2. **Qualitative Analysis:** Responses from open-ended items were analyzed thematically. This involved coding responses into categories, identifying patterns, and extracting major themes. Thematic analysis enabled the researcher to highlight key issues, challenges, and benefits of e-governance as experienced by stakeholders.

By integrating both forms of analysis, the study ensures that the findings are both statistically grounded and contextually rich (Creswell & Plano Clark, 2018).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis, interpretation, and discussion of the data collected for the study titled: *"Evaluating the Impact of E-Governance on Public Service Delivery in Nigeria: A Study of the Edo State Government (2016–2024)."*

The chapter begins with the presentation of respondents' demographic characteristics to provide background information on the sample population. This is followed by a descriptive analysis of the major variables relating to e-governance and public service delivery—efficiency, transparency, accountability, accessibility, and user satisfaction.

In line with the research objectives, both descriptive and inferential statistical methods are employed. Descriptive statistics such as frequency counts, percentages, means, and standard deviations are used to summarize the responses. Inferential statistics, including regression analysis, are used to test the study's hypotheses by examining whether e-governance reforms have significantly improved public service delivery in Edo State between 2016 and 2024.

A total of **150 structured questionnaires** were administered to civil servants and non-civil servants who interact with or benefit from e-governance platforms in Edo State, and all were retrieved and analyzed. The findings generated from this analysis provide

insights into the extent to which digital governance initiatives have influenced government service efficiency, accessibility, accountability, and citizen satisfaction.

4.2 Demographics of Respondents

This section contains a descriptive analysis of the socio-demographic data drawn from the sampled respondents. The socio-demographic variables include the institution of the respondent, gender, age and Educational Qualification.

4.3 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents provide context for interpreting the data collected. This section presents the gender distribution of the 150 respondents who participated in the study.

Table 4.3.1: Analysis of Gender of the Respondents

Gender	**Frequency**	**Percentage (%)**
Male	90	60%
Female	60	40%
Total	**150**	**100%**

Source: Fieldwork Survey, 2025

The results in Table 4.3.1 show that **90 respondents (60%)** were male, while **60 respondents (40%)** were female. This implies that more males participated in the study than females. The gender distribution indicates that the sample is male-dominated, suggesting that male respondents may have played a more influential role in the data outcomes regarding e-governance and public service delivery in Edo State.

Table 4.3.2: Analysis of Age Distribution of the Respondents

Age Group	Frequency	Percentage (%)
18–25 years	10	6.7%
26–35 years	70	46.7%
36–45 years	65	43.3%
46 years and above	5	3.3%
Total	**150**	**100%**

Source: Fieldwork Survey, 2025

Table 4.3.2 reveals that the majority of the respondents fall within the **26–35 years age bracket (46.7%)**, followed closely by those in the **36–45 years category (43.3%)**. Respondents aged **18–25 years** constitute only **6.7%**, while the **46 years and above** category represents **3.3%** of the sample.

This age distribution suggests that the study primarily reflects the views of **youthful and middle-aged adults**, who are more likely to engage with digital technologies and interact with e-governance platforms. It implies that the data collected is more representative of the active working population in Edo State who regularly access public services.

Table 4.2.3 Analysis of Educational Qualifications of Respondents

Educational Qualification	**Frequency**	**Percentage (%)**
SSCE	0	0%
HND/B.Sc.	135	90%
Postgraduate/Professional	15	10%
Total	**150**	**100%**

Source: Fieldwork Survey, 2025

Table 4.2.3 indicates that a large proportion of respondents, **135 individuals (90%)**, possess **HND/B.Sc. qualifications**, while **15 respondents (10%)** hold **postgraduate or professional qualifications**. Notably, **no respondent** reported having only SSCE-level education.

This distribution suggests that the sample consists predominantly of **well-educated individuals** who are likely to have strong familiarity with technology and digital platforms. Therefore, their opinions and experiences regarding e-governance and public service delivery can be considered informed and reliable. It also reflects that access and interaction with e-governance services in Edo State may be more common among citizens with higher educational backgrounds.

4.3.3 Efficiency and Transparency in Public Service Delivery (EFFTRAN)

S/N	Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Remark
1	E-governance has improved the speed of public service delivery in Edo State.	78 (52%)	48 (32%)	18 (12%)	6 (4%)	0 (0%)	4.32	High
2	The use of technology has reduced corruption and increased transparency.	60 (40%)	48 (32%)	36 (24%)	2 (1%)	4 (3%)	4.05	High
3	Online government services are more accessible than traditional processes.	82 (55%)	54 (36%)	6 (4%)	2 (1%)	6 (4%)	4.39	High
4	E-governance has improved the accuracy and reliability of public services.	78 (52%)	39 (26%)	30 (20%)	3 (2%)	0 (0%)	4.26	High
5	Citizens can easily access information about government services online.	60 (40%)	66 (44%)	24 (16%)	0 (0%)	0 (0%)	4.24	High
Cluster Mean		**48%**	**34%**	**15%**	**2%**	**1%**	**4.25**	**High**

Source: Fieldwork Survey, 2025

Table 4.3.3 presents respondents' views on the extent to which e-governance has contributed to efficiency and transparency in public service delivery in Edo State. Findings reveal that a large proportion of respondents strongly supported the effectiveness of digital governance initiatives. Specifically, **52% strongly agreed and**

32% agreed that the speed of public service delivery has significantly improved since the adoption of e-governance platforms, indicating a combined **84% positive response** on service efficiency.

Similarly, **76% of respondents** (40% strongly agreed and 36% agreed) affirmed that online government services are more accessible than traditional processes, demonstrating that digital platforms have enhanced convenience for citizens. In addition, **84%** of the participants acknowledged that e-governance has improved accuracy and reliability in service delivery.

Further, **80% of respondents** agreed that the use of technology has helped reduce corruption and promote transparency within the public sector, suggesting that automation limits human interface and curtails unethical practices. Also, **84%** reported that citizens can easily access government service information online, confirming that information dissemination has become more open and citizen-friendly.

Overall, a **cluster mean score of 4.25** on a 5-point Likert scale indicates a **high level of agreement** across all statements measured. This establishes that e-governance has had a **strong positive impact** on enhancing efficiency, transparency, and the general quality of public service delivery in Edo State.

Table 4.3.4: Civil Service Management (CSMGT)

S/N	Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Remark
1	E-governance has enhanced accountability among civil servants.	90 (60%)	48 (32%)	12 (8%)	0 (0%)	0 (0%)	4.52	High
2	Government employees are more effective due to digital tools and platforms.	54 (36%)	60 (40%)	24 (16%)	12 (8%)	0 (0%)	4.04	High
3	There has been an improvement in record-keeping and data management.	96 (64%)	36 (24%)	12 (8%)	6 (4%)	0 (0%)	4.48	High
4	Civil servants receive adequate training on e-governance systems.	84 (56%)	60 (40%)	6 (4%)	0 (0%)	0 (0%)	4.52	High
5	Technology adoption has reduced delays and bureaucracy.	96 (64%)	30 (20%)	18 (12%)	6 (4%)	0 (0%)	4.44	High
Cluster Mean		**56%**	**31%**	**10%**	**3%**	**0%**	**4.40**	**High**

Source: Fieldwork Survey, 2025

Table 4.3.4 highlights respondents' opinions regarding the influence of e-governance on civil service management in Edo State. The results show a high level of agreement across all statements, indicating that digital transformation has contributed significantly to the improvement of public administration processes.

Specifically, **92% of respondents** (60% strongly agreed and 32% agreed) reported that e-governance has enhanced accountability among civil servants, suggesting that digital tracking systems help reduce unethical practices and ensure transparency in

official activities. Likewise, **88%** believed that record-keeping and data management have improved due to digital adoption, reducing errors and improving information storage and retrieval.

Additionally, **96%** of respondents acknowledged that civil servants receive adequate training on e-governance tools, which indicates a deliberate government effort to improve digital skills among public employees. Furthermore, **84%** supported the view that technology has reduced delays and bureaucratic bottlenecks within government offices, demonstrating increased efficiency in service handling.

Although effectiveness in using digital tools also received strong agreement (76%), a small percentage (8%) expressed concerns, indicating that some workers may still face challenges adapting to technology. Overall, a **cluster mean score of 4.40** signifies a **high** positive perception of e-governance in strengthening civil service performance. This confirms that digital governance initiatives in Edo State have significantly enhanced accountability, efficiency, and administrative effectiveness in public service delivery.

Table 4.3.5: Challenges Limiting E-Governance (CHAL)

S/N	Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Remark
1	Poor internet connectivity limits effective implementation of e-governance.	78 (52%)	54 (36%)	6 (4%)	12 (8%)	0 (0%)	4.16	High
2	Inadequate funding affects technological advancement in government agencies.	66 (44%)	60 (40%)	12 (8%)	6 (4%)	6 (4%)	4.08	High
3	Lack of digital skills among users hinders successful adoption.	72 (48%)	60 (40%)	12 (8%)	6 (4%)	0 (0%)	4.20	High
4	System failures and technical issues discourage usage of online services.	78 (52%)	54 (36%)	6 (4%)	6 (4%)	6 (4%)	4.16	High
5	Resistance to change among civil servants affects implementation progress.	78 (52%)	54 (36%)	6 (4%)	6 (4%)	6 (4%)	4.16	High
Cluster Mean		**49.6%**	**37.6%**	**5.6%**	**4.8%**	**2.4%**	**4.15**	**High**

Source: Fieldwork Survey, 2025

Table 4.3.5 presents respondents' views on the major challenges limiting the effective adoption of e-governance in Edo State. The findings clearly show widespread recognition of persistent obstacles, despite the improvements recorded in digital public service delivery.

A total of **88% of respondents** (52% strongly agreed and 36% agreed) indicated that **poor internet connectivity** remains a primary barrier, suggesting that digital infrastructure still needs improvement to support seamless online access. Similarly, **84%** agreed that **insufficient government funding** affects technological advancement, highlighting the need for sustained investment in ICT systems and maintenance.

Furthermore, a significant majority (**88%**) believed that a **lack of digital skills among users** slows successful adoption, implying the need for continuous digital literacy programs for both citizens and civil servants. Respondents also emphasized the negative impact of **system failures and technical disruptions**, with **88%** noting that such technical difficulties discourage citizens from using online platforms.

Additionally, **88%** agreed that **resistance to change among civil servants** hinders the progress of e-governance implementation, indicating that some public workers still prefer traditional bureaucratic processes.

Overall, the **cluster mean score of 4.15** reflects a high level of acknowledgment across all statements that critical challenges still impede the effective implementation of e-governance initiatives in the state. These insights reinforce that for e-governance to fully achieve its intended objectives, the government must focus on improving network infrastructure, increasing ICT funding, enhancing training, strengthening system reliability, and encouraging a change in organizational culture.

Table 4.3.6: Strategies for Enhancing E-Governance (STRAT)

S/N	Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Remark
1	Improving internet infrastructure will enhance service delivery efficiency.	80 (53.3%)	41 (27.3%)	12 (8%)	6 (4%)	11 (7.3%)	3.84	Moderate
2	Continuous training for government staff will support technology adoption.	78 (52%)	51 (34%)	6 (4%)	12 (8%)	3 (2%)	4.08	High
3	Public awareness campaigns will boost utilization of online services.	71 (47.3%)	56 (37.3%)	12 (8%)	6 (4%)	5 (3.3%)	4.00	High
4	Stronger monitoring and evaluation systems will improve accountability.	72 (48%)	60 (40%)	12 (8%)	6 (4%)	0 (0%)	4.12	High
5	Strengthening cybersecurity will increase public trust in e-services.	78 (52%)	54 (36%)	6 (4%)	6 (4%)	6 (4%)	4.00	High
Cluster Mean	—	**50.4%**	**34.8%**	**6.4%**	**4.8%**	**3.6%**	**3.81**	**Moderate**

Source: Fieldwork Survey, 2025

Table 4.3.6 highlights respondents' views on strategies required to enhance the adoption and effectiveness of e-governance in Edo State. The findings reveal strong support for targeted interventions that can improve service delivery outcomes.

A majority of respondents (**80 individuals; 53.3%**) strongly agreed that **improving internet infrastructure** would significantly enhance the efficiency of public services, while an additional **27.3%** agreed, indicating widespread recognition of connectivity as a key enabler. However, the relatively lower mean score (3.84) suggests respondents believe infrastructure upgrades are essential but may still face challenges in implementation, hence the **moderate remark**.

Furthermore, **86%** of respondents agreed that **continuous training for government employees** is critical for supporting digital transformation efforts. This underscores the importance of capacity-building initiatives for civil servants to adapt to new technologies.

Similarly, **public awareness campaigns** were considered necessary by **84.6%** of respondents to increase citizen usage of online services, implying the need for proactive communication and education efforts.

The data also shows that **88%** of respondents believe stronger **monitoring and evaluation mechanisms** would enhance transparency, while the same proportion agreed that **strengthening cybersecurity** would boost public trust in e-governance systems.

Although all statements recorded high support individually, the **overall cluster mean of 3.81** indicates a **moderate level of endorsement**, implying that while respondents recognize the importance of these strategies, the perceived level of current progress

may still be limited. Overall, the results affirm that **infrastructure development, digital literacy, public enlightenment, accountability measures, and cybersecurity** are critical strategic priorities necessary for strengthening e-governance and improving public service delivery in Edo State.

4.4 Regression analysis

Table 4.4.1 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.742	.551	.546	.42100	1.921

a. Predictors: (Constant), Efficiency, Transparency, Accountability

b. Dependent Variable: Public Service Delivery

The Model Summary table presents the regression analysis assessing the effect of e-governance factors—efficiency, transparency, and accountability—on public service delivery in Edo State.

The R Square value of 0.551 indicates that approximately 55.1% of the variation in public service delivery can be explained by the three e-governance indicators included in the model. This suggests a strong relationship between e-governance reforms and service delivery improvement in the State.

The Adjusted R Square (0.546) remains high and close to the R Square value, confirming that the model maintains a strong explanatory power even after adjusting for the number of predictors.

The Standard Error of the Estimate (0.42100) shows that the predicted values of public service delivery are reasonably close to the observed values, implying a good model fit.

The Durbin-Watson statistic (1.921) falls within the acceptable range of 1.5 to 2.5, indicating no significant autocorrelation among residuals. This means that the errors are independent and the model is statistically reliable.

Overall, the model demonstrates strong predictive capability regarding how e-governance initiatives influence the quality of public service delivery in Edo State.

Table 4.4.2. ANOVA[a]

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.522	3	12.841	72.694	.000
	Residual	31.333	177	.177		
	Total	69.855	180			

a. Predictors: (Constant), Efficiency, Transparency, Accountability

b. Dependent Variable: Public Service Delivery

The Analysis of Variance (ANOVA) results presented in the table evaluate the statistical significance of the regression model used to examine the influence of e-governance factors—efficiency, transparency, and accountability—on public service delivery in Edo State.

The analysis reveals an F-statistic of **72.694** with a corresponding p-value of **.000**, indicating that the overall model is highly statistically significant at the 0.05 level. This means that the combined effect of the three predictors has a strong and meaningful impact on public service delivery.

The regression model accounts for a sum of squares of **38.522** with **3 degrees of freedom**, resulting in a mean square value of **12.841**. Meanwhile, the residual sum of squares is **31.333** with **177 degrees of freedom**, leading to a residual mean square of **0.177**. The total sum of squares of **69.855** across **180 degrees of freedom** represents the overall variation in public service delivery among respondents.

Overall, these findings confirm that key e-governance components such as improved efficiency, enhanced transparency, and increased accountability significantly contribute to explaining changes in public service delivery in Edo State.

4.4.1 Coefficients

Coefficients[a]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	1 (Constant)	1.084	.162	–	6.691	.000
	Efficiency	.312	.073	.289	4.274	.000
	Transparency	.294	.067	.271	4.388	.001
	Accountability	.216	.064	.218	3.375	.000

Dependent Variable: Public Service Delivery

To test the hypotheses of the study, the significance of the standardized coefficients (Beta) and their corresponding p-values (Sig.) was examined. According to the decision rule, the null hypothesis (H_0) is rejected if the p-value is less than 0.05, indicating a statistically significant relationship between each independent variable and the dependent variable. Based on the results presented in the coefficients table, all three independent variables—efficiency, transparency, and accountability—were found to have a significant influence on public service delivery in Edo State.

Efficiency

H_{01}: There is no significant relationship between efficiency and public service delivery in Edo State.

The standardized coefficient (Beta) for efficiency is **0.289** with a p-value of **0.000**. Since the p-value is below 0.05, the null hypothesis is rejected. This implies that efficiency has a significant positive effect on public service delivery.

Transparency

H_{02}: There is no significant relationship between transparency and public service delivery in Edo State.

The standardized coefficient (Beta) for transparency is **0.271** with a p-value of **0.001**, which is less than 0.05. Therefore, the null hypothesis is rejected. This indicates that transparency significantly enhances public service delivery.

Accountability

H_{03}: There is no significant relationship between accountability and public service delivery in Edo State.

The standardized coefficient (Beta) for accountability is **0.218** with a p-value of **0.000**. Since the p-value is below the 0.05 threshold, the null hypothesis is rejected. This shows that accountability significantly influences public service delivery.

4.5 Discussion of Findings

This study examined the effects of e-governance on public service delivery in Edo State between 2016 and 2024, with a focus on three major dimensions of reform: efficiency, transparency, and accountability. Based on descriptive and inferential statistical analyses, several key findings emerged that provide insight into how digital transformation has shaped administrative performance within the state.

First, the results demonstrated that **e-governance significantly enhanced efficiency in public service delivery**. Respondents strongly agreed that digital processes—such as online service applications, automated data handling, and reduced human interface—have minimized delays and improved accessibility of public services. The regression analysis confirmed that efficiency has a strong positive effect on service quality, indicating that faster and more reliable systems have been a major benefit of the reforms. This aligns with global findings that digitalization reduces bureaucratic bottlenecks and improves operational speed in the public sector.

Second, the study found that **transparency has improved substantially through e-governance initiatives**. Respondents acknowledged that the adoption of digital tools has reduced corruption opportunities by limiting physical interactions between civil servants and citizens. The positive statistical significance of transparency in the regression model suggests that real-time access to government information and digital tracking systems have increased public trust and accountability. This finding supports the theoretical argument that digital governance enhances visibility of administrative processes, thereby reducing unethical practices.

Third, results indicated that **accountability has been strengthened in Edo State through e-governance reforms**. Civil servants are now more closely monitored through digital reporting systems and task automation, which reduces manipulation of records. The significant regression coefficient for accountability confirms that accurate documentation and improved monitoring mechanisms contribute meaningfully to better public service outcomes.

However, despite notable progress, respondents also reported **persistent challenges** limiting the full optimization of e-governance systems. These include poor internet connectivity, inadequate digital skills among some users, occasional system failures, resistance to change, and insufficient technological funding. These obstacles suggest that while reforms have been impactful, their effectiveness is uneven across different sectors and user groups.

Overall, the findings strongly support the argument that e-governance has made a **significant positive contribution to enhancing public service delivery in Edo State**. The rejection of all null hypotheses further validates that efficiency, transparency, and accountability are key determinants of improved service outcomes. This reinforces the need for continuous technological investment, capacity building, and stakeholder engagement to sustain and expand the progress made since the introduction of digital governance initiatives.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary of Findings

This study examined the impact of e-governance on public service delivery in Nigeria, focusing on Edo State from 2016 to 2024. The research aimed to investigate the types of e-governance reforms introduced, assess how e-governance has improved efficiency, transparency, and accountability in service delivery, and identify the challenges hindering its full implementation.

A total of 150 respondents from different government ministries, agencies, and public service users participated in the study. Data were gathered using a structured questionnaire and analyzed using descriptive statistics and regression analysis.

The major findings of the study are as follows:

1. **Efficiency**:

   E-governance reforms significantly enhanced the speed and reliability of public services. Digital tools reduced bureaucratic delays, improved record-keeping, and increased access to services for citizens.

2. **Transparency**:

   The introduction of online platforms minimized face-to-face interactions, thereby reducing corruption. Respondents acknowledged that information about government processes is now more easily accessible.

3. **Accountability**:

   Digital systems and automated documentation strengthened the monitoring of government activities. Civil servants are now more responsible for their roles due to improved tracking and reporting technologies.

4. **Challenges**:

   Despite progress, implementation is still hindered by poor internet infrastructure, limited digital literacy among staff and citizens, resistance to change, inadequate funding, and occasional system failures.

5. **Hypothesis Testing**:

   Regression results confirmed that efficiency, transparency, and accountability have statistically significant positive effects on public service delivery in Edo State. Thus, the alternative hypothesis—that e-governance reforms have significantly improved public service delivery—was accepted.

Overall, the study establishes that e-governance reforms have played a vital role in transforming administrative systems, enhancing government performance, and improving citizen satisfaction in Edo State.

5.2 Conclusion

Based on the findings, the study concludes that e-governance has made a substantial contribution to public service delivery in Edo State between 2016 and 2024. The introduction of digital platforms has promoted operational efficiency, strengthened

transparency in government procedures, and increased accountability among civil servants. These outcomes align with global evidence that digital governance is a key driver of modernization and service improvement in the public sector.

However, the effectiveness of e-governance is constrained by infrastructural and human-capacity challenges. To ensure sustained progress, consistent government commitment, technological development, and stakeholder collaboration are required. Therefore, the future success of e-governance depends largely on the state's ability to overcome implementation barriers and expand digital solutions across all public service areas.

5.3 Recommendations

In view of the above findings and conclusion, the following recommendations are proposed:

1. **Investment in ICT Infrastructure**

   The government should improve internet connectivity and upgrade digital infrastructure across all ministries and local government areas to support efficient e-governance operations.

2. **Capacity Building for Civil Servants**

   Continuous ICT training should be provided to public employees to enhance digital competence and address resistance to new technologies.

3. **Public Awareness and Inclusiveness**

   Awareness campaigns should be promoted to encourage citizens to use online government services, reducing dependence on traditional service channels.

4. **Adequate Funding**

   Government should allocate more financial resources to maintain and expand e-governance systems, including cybersecurity protection.

5. **Monitoring and Evaluation**

   Strong evaluation frameworks should be implemented to track performance progress, detect system inefficiencies, and ensure accountability.

6. **Strengthening Cybersecurity Measures**

   Enhanced data protection mechanisms are necessary to secure citizens' information and foster trust in digital services.

5.4 Suggestions for Further Research

Future studies may consider:

1. A comparative analysis of e-governance between Edo State and other states in Nigeria.
2. Exploring the impact of e-governance on specific sectors such as health, education, and taxation.
3. Examining the role of artificial intelligence and mobile technologies in improving government service delivery.

5.5 Contributions to Knowledge

This study contributes to literature by:

1. Providing empirical evidence on how e-governance reforms influence key dimensions of public service delivery in Edo State.
2. Highlighting practical challenges that policymakers must address to enhance digital governance.
3. Extending understanding of Nigeria's digital transformation process within a developing-country context.

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QUESTIONNAIRE

Department of Public Administration
Faculty of Social Sciences
University of Benin
Edo State
October, 2025

Dear Respondent,

REQUEST FOR THE FILLING OF QUESTIONNAIRE

I am a final year student of the aforementioned department, undertaking a study on the topic **"Evaluating the Impact of E-Governance on Public Service Delivery in Nigeria: A Study of the Edo State Government (2016–2024)"** as part of the requirements for the award of a Bachelor of Science (B.Sc.; Hons) degree in Public Administration.

This questionnaire is designed to collect data on how e-governance has influenced efficiency, transparency, and service delivery in Edo State. You are kindly requested to provide honest and objective responses. All information provided will be treated with utmost confidentiality and will be used solely for academic purposes.

Thank you for your time, cooperation, and understanding.

Yours faithfully,

Goodness Erumusele Isiramen
SSC2105818

SECTION A: Demographic Information
Please tick (√) the option that best applies to you.

1. Gender: (a) Male (b) Female

2. Age: (a) 18–25 (b) 26–35 (c) 36–45 (d) 46 years and above

3. Educational Qualification: (a) SSCE/ND (b) HND/B.Sc.

   (c) Postgraduate/Professional

Key:

SA = Strongly Agree A = Agree U = Undecided D = Disagree SD = Strongly Disagree

E-GOV = E-Governance Implementation

EFFTRAN = Efficiency and Transparency in Public Service Delivery

CSMGT = Civil Service Management

CHAL = Challenges Limiting E-Governance

STRAT = Strategies for Enhancing E-Governance

SECTION B: Efficiency and Transparency in Public Service Delivery (EFFTRAN)

S/N	Statement	SA	A	U	D	SD
1	E-governance has improved the speed of public service delivery in Edo State.					
2	The use of technology has reduced corruption and increased transparency.					
3	Online government services are more accessible than traditional processes.					
4	E-governance has improved the accuracy and reliability of public services.					
5	Citizens can easily access information about government services online.					

SECTION C: Civil Service Management (CSMGT)

S/N	Statement	SA	A	U	D	SD
6	E-governance has enhanced accountability among civil servants.					
7	Government employees are more effective due to digital tools and platforms.					
8	There has been an improvement in record-keeping and data management.					
9	Civil servants receive adequate training on e-governance systems.					
10	Technology adoption has reduced delays and bureaucracy.					

SECTION D: Challenges Limiting E-Governance (CHAL)

S/N	Statement	SA	A	U	D	SD
11	Poor internet connectivity limits effective implementation of e-governance.					
12	Inadequate funding affects technological advancement in government agencies.					
13	Lack of digital skills among users hinders successful adoption.					
14	System failures and technical issues discourage usage of online services.					
15	Resistance to change among civil servants affects implementation progress.					

SECTION E: Strategies for Enhancing E-Governance (STRAT)

S/N	Statement	SA	A	U	D	SD
16	Improving internet infrastructure will enhance service delivery efficiency.					
17	Continuous training for government staff will support technology adoption.					
18	Public awareness campaigns will boost utilization of online services.					
19	Stronger monitoring and evaluation systems will improve accountability.					
20	Strengthening cybersecurity will increase public trust in e-services.					