Digital Governance and Public Service Transformation in Akwa Ibom State

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ABSTRACT
The integration of digital governance and public service transformation has become a cornerstone of public administration reform globally, particularly in improving efficiency, transparency, and accountability in public service delivery. This study examined the effect of digital governance on public service transformation in Akwa Ibom State focusing on e-government service delivery, digital transparency, information communication technology (ICT) and identifying key challenges that affect their effectiveness. The study adopted the Technology Acceptance Model (TAM) framework as its theoretical foundation. Using a descriptive survey design, data were collected from 400 respondents drawn from civil servants and residents in Akwa Ibom State that interact with e-government platforms using convenience sampling technique. Quantitative data were analysed using descriptive statistics, using tables and simple percentages, while hypotheses were tested using multiple regression analysis with the aid of Statistical Package for Social Sciences (SPSS Version 25). Findings revealed that e-government service delivery, digital transparency, and ICT infrastructure had positive and significant effects on public service transformation in Akwa Ibom State. The study concluded that digital governance significantly enhances efficiency, transparency, accountability, and accessibility of public services. It was recommended among others that government should invest more in ICT infrastructure, strengthen digital literacy among public servants, and improve transparency through digital platforms.
Keywords**:** *Digital Governance, Public Service Transformation, E-Government, Digital Transparency, ICT Infrastructure, Akwa Ibom State.*

1. INTRODUCTION
The emergence of digital governance and e-government transformation have become strong pillars of contemporary public administration across the globe, especially in the search of modern state institutions and improvement of efficiency in public service delivery. In the 21st century, the integration of digital technologies into governance processes has become indispensable for promoting transparency, accountability, and citizen participation in government activities (Heek, 2006).

In developing countries such as Nigeria, where public sector inefficiency, corruption, and poor service delivery remain recurrent challenges, digital governance provides an opportunity to address systemic weaknesses and build citizen trust in government institutions (Okot-Uma, 2018). Nigeria has made significant strides in introducing e-government initiatives, including the Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMIS), and the Integrated Payroll and Personnel Information System (IPPIS), all of which aim to promote transparency and accountability in public finance (Adegbola & Oyewole, 2020).

Digital transformation in public services is broadly defined as integrating digital

technologies into government operations to enhance service efficiency, accessibility, transparency, and responsiveness (Jun & Kim, 2022). While public service transformation involves great improvements in the quality, accessibility, efficiency, and responsiveness of government services to citizens (Akpan et al, 2024; Umoh et al., 2024).

According to the United Nations E-Government Survey (2022), digital governance increases public trust by enhancing openness, accountability, and faster service delivery. In Akwa Ibom State, government initiatives such as digital tax administration, recruitment portal, online payment systems, electronic documentation, and ICT-driven public administration reforms have contributed to the modernization of governance processes.

Despite these efforts, challenges such as inadequate ICT infrastructure, poor internet connectivity, low digital literacy, and resistance to technological change continue to hinder effective digital governance implementation (Umoh, 2021; Ndaeyo et al., 2025). As a result, this study examines the effect of digital governance on public service transformation in Akwa Ibom State.

Statement of the Problem

Government institutions across the world are currently adopting digital technologies to improve public service delivery and administrative efficiency. However, despite various investments in digital governance initiatives in Nigeria and Akwa Ibom State in particular, many public institutions still experience setbacks in service delivery, bureaucratic bottlenecks, poor transparency, and limited citizen engagement. (Okon & Effiong, 2024).

Most citizens still face problems accessing government services digitally due to poor ICT infrastructure, inadequate digital skills, and limited awareness of digital platforms. Also, concerns about accountability, corruption, and inefficiency in public service delivery remain significant challenges (Nwankwo & Chukwuemeka, 2023).

This study seeks to investigate the effect of digital governance dimensions such as e-government service delivery, digital transparency, and ICT infrastructure on public service transformation in Akwa Ibom State.

Objectives of the Study

The main objective of this study was to examine the effect of digital governance on public service transformation in Akwa Ibom State.

The specific objectives were to:

i. investigates the effect of e-government service delivery on public service transformation in Akwa Ibom State.
ii. determine the effect of digital transparency on public service transformation in Akwa Ibom State.
iii. examine the effect of ICT infrastructure on public service transformation in Akwa Ibom State.

Hypotheses of the Study

The following null hypotheses were formulated and tested in the study:

Ho_1: E-government service delivery has no significant effect on public service transformation in Akwa Ibom State.

Ho_2: Digital transparency has no significant effect on public service transformation in Akwa Ibom State.

Ho_3: ICT infrastructure has no significant effect on public service transformation in Akwa Ibom State.

2. LITERATURE REVIEW

Concept of Digital Governance

Digital governance is to the application of digital technologies and electronic communication systems in government administration and public service delivery. According to United Nations (2022), digital governance includes the use of Information and Communication Technology (ICT) tools to enhance efficiency, accountability, transparency, and interaction between government and citizens.

Digital governance helps governments to provide online services such as tax payments, business registration, public complaints management, electronic procurement, and digital identification systems. It reduces bureaucratic delays and enhances accessibility to government services (OECD, 2021). The main dimensions of digital governance in this study are e-government service delivery, digital transparency, and ICT infrastructure.

E-Government Service Delivery

E-government service delivery is to the use of internet-based platforms and digital technologies to provide government services to citizens. According to Sharma and Gupta (2021), e-government improves efficiency by reducing paperwork, administrative delays, and physical interactions in public offices.

World Bank, (2020) reports mentioned that digital service delivery enables citizens to access government services online without unnecessary stress. Examples include online tax payments, digital licensing, electronic documentation, and online applications for government services.

Digital Transparency

Bertot, Jaeger and Grimes, (2019) stated that digital transparency is to the openness and accessibility of government information through digital platforms. It allows citizens to access public records, budget information, procurement activities, and government policies electronically.

Transparency through digital governance reduces corruption and increases public trust in government institutions. Citizens are better informed and can monitor government activities more effectively (Meijer, 2015).

ICT Infrastructure

According to Laudon and Laudon (2022), ICT infrastructure gives the technological foundation necessary for effective digital operations and public service delivery. ICT infrastructure includes technological facilities such as internet connectivity, computers, software systems, telecommunication networks, and digital databases that support electronic governance.

Adequate ICT infrastructure is essential for effective digital governance implementation. Poor infrastructure can hinder service delivery and reduce citizens' access to digital government services (World Bank, 2021).

Public Service Transformation

Public service transformation refers to significant improvements in the effectiveness, efficiency, accessibility, and quality of government services. It involves administrative reforms aimed at improving citizens' satisfaction and enhancing government performance (Osborne, 2018).

Digital governance contributes to public service transformation by simplifying procedures, increasing transparency, reducing corruption, and promoting accountability (United Nations, 2022).

Theoretical Framework

Technology Acceptance Model (TAM)

This study was anchored on the Technology Acceptance Model (TAM) developed by Davis (1989). The model explains how users accept and utilize technology systems based on perceived usefulness and perceived ease of use.

The model is relevant to this study because the success of digital governance depends on the willingness of citizens and public servants to adopt and use digital platforms for service delivery.

Perceived Usefulness

Citizens are more likely to adopt digital governance platforms if they believe such systems improve service delivery efficiency and convenience.

Perceived Ease of Use

Digital governance systems that are easy to operate encourage wider acceptance and participation among users.

Attitude Towards Technology

Positive perceptions about digital systems influence citizens' willingness to utilize e-government services.

The model therefore explains how digital governance can enhance public service transformation through increased technology adoption.

Empirical Review

Eze and Nwakwo (2023) investigated e-governance and administrative efficiency in Rivers State with a focus on service responsiveness and citizen satisfaction. Anchored in the Diffusion of Innovation Theory, the study utilized qualitative content analysis of policy documents and interviews with key administrative officers. Findings showed that the introduction of digital platforms reduced face-to-face interactions and promoted transparency, but frequent power outages and unreliable internet connectivity limited full-scale implementation. The study concluded that digital governance can significantly improve service delivery when supported by reliable infrastructure and institutional continuity.

Okon and Effiong (2022) examined digital transparency and accountability in local government administration in Nigeria. The study is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989), which suggests that perceived usefulness and perceived ease of use shape technological adoption in organizational settings. A descriptive qualitative design was employed, relying on secondary data sourced from government reports, academic journals, policy documents, and publications of international organizations. Findings revealed that digital transparency positively influenced accountability and reduced corruption in public institutions. Three recommendations are offered: investment in infrastructure and digital access, strengthening human capacity and digital literacy, and establishing monitoring and evaluation frameworks to track platform performance and transparency.

Akpan and Udo (2024) investigated ICT infrastructure and administrative efficiency in public institutions in Akwa Ibom State. The work adopted descriptive method which allowed it to rely on documentary evidence as its source of data collection to examine how digitization and e-payment systems affected ghost worker fraud and financial corruption within the Akwa Ibom State civil service. Public Value Theory served as the theoretical framework. The study found that while advances in Information and Communication Technology (ICT) have significantly improved service delivery in developed nations, developing countries like Nigeria face a notable digital divide. This divide is due to factors such as limited technology access, inadequate infrastructure, resistance to change, and the

dearth of skilled ICT personnel. The study recommended among others implementation of comprehensive bio-metric systems to ensure payroll accuracy.

3. RESEARCH METHODOLOGY

Research Design

The survey research design was adopted for the study because it enabled the researcher to collect data directly from respondents regarding digital governance and public service transformation.

Population of the Study

The population consisted of civil servants and residents in Akwa Ibom State estimated at 3,920,208 according to National Population Commission (2023).

Sample Size Determination

The sample size of 400 respondents was determined using the Taro Yamane (1975) formula for finite population.

Sampling Technique

Convenience sampling technique was adopted in selecting respondents for the study because it allowed easy access to participants.

Method of Data Collection

Data were collected using a structured questionnaire divided into two sections. Section A focused on demographic characteristics, while Section B measured variables relating to digital governance and public service transformation using a five-point Likert scale.

Reliability of the Instrument

The research instrument was subjected to Cronbach Alpha reliability to test the level of reliability of the research instrument. The result was substantially high enough to justify the use of the research instrument as shown below.

Table: 3.1: Cronbach Alpha Pre-test Result

S/N	Variables	No of Items	Coefficient
1	E-govt. serv. delivery	3	0.734
2	Digital transparency	3	0.677
3	ICT infrastructure	3	0.799
4	Public serv.transfor.	3	0.801

Source: The Researcher's Compilation (2026).

The resulting Cronbach coefficients for each item were 0.6 above, indicating the reliability, or internal consistency of the tested items**.**

Method of Data Analysis

Data were analyzed using descriptive statistics such as tables and percentages, while hypotheses were tested using multiple regression analysis with the aid of Statistical Package for Social Sciences (SPSS Version 25).

4. DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

Table 4.1: Summary of Multiple Regression Analysis for the joined effect of E-govt. serv. Delivery, digital transparency and ICT infrastructure on public service transformation in Akwa Ibom State, Nigeria.

	B_1	SE	B_2	t-value	Significant (2 tailed)

Constant	0.727	0.243		2.989	0.003
E-govt. serv. Delivery	0.712	0.037	0.715	19.318	0.000
Digital transparency	0.057	0.033	0.072	1.708	0.089
ICT infrastructure	0.177	0.025	0.228	6.945	0.000
Dependent Variable: Transformation					
R =	0.951				
R^2 =	0.905				
Adjusted R-Square =	0.904				
Std. Error of estimate =	0.71936				
F-statistics =	716.742				
Probability (Significant p-value) =	0.000^b				

**significantly related at 5% ($p<0.05$). B_1= unstandardized beta, B_2= standardized beta, SE= standard error.*

Source: The Researcher's Computation (2026).

The regression coefficient of $R^2 = 0.891$ indicates that digital governance variables jointly explained approximately 89% of the variation in public service transformation.

The findings further revealed that e-government service delivery, digital transparency, and ICT infrastructure significantly influenced public service transformation in Akwa Ibom State.

Discussion of Findings

The findings revealed that digital governance significantly affects public service transformation in Akwa Ibom State.

The result of the first hypothesis showed that e-government service delivery had a significant positive effect on public service transformation. This finding agrees with Eze and Nwankwo (2023), who found that digital service delivery improves efficiency and accessibility of public services.

The second hypothesis revealed that digital transparency significantly affects public service transformation. This finding supports Okon and Effiong (2022), who observed that transparency through digital platforms promotes accountability and reduces corruption.

The third hypothesis indicated that ICT infrastructure significantly influences public service transformation. This agrees with Akpan and Udo (2024), who found that ICT facilities improve administrative performance and efficiency.

Summary of Findings

The study examined the effect of digital governance on public service transformation in Akwa Ibom State. Findings revealed that:

1. E-government service delivery had a positive and significant effect on public service transformation.
2. Digital transparency significantly improved accountability and efficiency in public institutions.
3. ICT infrastructure positively influenced effective public service delivery.

5. CONCLUDING REMARKS

The study concluded that digital governance significantly enhances public service transformation in Akwa Ibom State. E-government service delivery, digital transparency, and ICT infrastructure improve efficiency, accountability, accessibility, and responsiveness in public administration.

The adoption of digital technologies in governance therefore remains essential for

achieving effective public service delivery and sustainable development.

Recommendations

Based on the findings, the following recommendations were made:

i. Government should invest more in ICT infrastructure to improve internet connectivity and digital access across public institutions.
ii. Government agencies should enhance digital transparency by making public information easily accessible through online platforms.
iii. Public servants should receive regular ICT training to improve digital literacy and effective use of e-government systems.

REFERENCES

Adegbola, E. A., & Oyewole, O. S. (2020). E-Government implementation and public service delivery in Nigeria. Journal of Public Administration and Policy Research, 12(2), 34–42. doi:10.5897/JPAPR2020

Akpan, E. D, Imo-Ita, I., Ntuen, D. D. (2024). Fadama III Development Project and Sustainable Income of Rural Farmers in Akwa Ibom State, Nigeria (2009 – 2022). AKSU Journal of Administration and Corporate Governance, Volume 4(3), 219-234.

Akpan, D., & Udo, E. (2024). ICT infrastructure and administrative efficiency in public institutions in Akwa Ibom State. *International Journal of Public Administration*, 8(2): 44-59.

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2019). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, *27*(3), 264–271.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3): 319-340.

Eze, P., & Nwankwo, T. (2023). E-governance and public service delivery in Lagos State, Nigeria. *Journal of Public Sector Management*, 5(1): 22-36.

Heeks, R. (2006). Implementing and managing e-Government: An international text. London: SAGE Publications.

Jun, S., Park, J., & Kim, J. Y. (2022, July). Digital transformation landscape in Asia and the Pacific: Aggravated digital divide and widening growth gap. United Nations ESCAP, Information and Communications Technology and Disaster Risk Reduction Division. https://repository.unescap.org/handle/20.500.12870/4630

Laudon, K. C., & Laudon, J. P. (2022). *Management information systems: Managing the digital firm* (17th ed.). Pearson Education.

Meijer, A. (2015). Government transparency in historical perspective: From the ancient regime to open data in the Netherlands. *International Journal of Public Administration, 38*(3), 189–199.

National Population Commission (2023). *Population Estimates for Nigerian States*. Abuja: NPC.

Ndaeyo, E. A., Atakpa, O. E., Akpan, E. D., & Paul, K. U. (2025). Tertiary education trust fund (TETFUND) and manpower development in Akwa Ibom State University, Nigeria (2012-2024). *International Journal of Innovative Research in Social Sciences and Strategic Management Techniques*, *11*(1), 240-260.

Nwankwo, B. C., & Chukwuemeka, E. E. O. (2023). Digital transformation and governance effectiveness in post-COVID-19 Nigeria: Issues and policy implications. African Journal of Public Administration and Management, 34(1), 45–60.

OECD. (2021). *Digital government review: Strengthening the digital transformation of the public sector*. OECD Publishing.

Okon, J. U., & Effiong, V. E. (2024). Digital inclusion and public sector innovation in Nigeria: Prospects and constraints. Journal of African Governance and Development Studies, 6(2), 78– 92.

Okon, J., & Effiong, A. (2022). Digital transparency and accountability in local government administration in Nigeria. *African Journal of Governance and Development*, 7(3): 55-70.

Okot-Uma, R. W. (2018). Electronic governance: Re-inventing good governance. London: Commonwealth Secretariat

Osborne, S. P. (2018). *The new public governance? Emerging perspectives on the theory and practice of public governance*. Routledge.

Sharma, S., & Gupta, R. (2021). E-government implementation and public service delivery efficiency. *International Journal of Public Administration and Management Research, 6*(2), 45–58.

Umoh, S. A. (2021). The viability of makeup as a catalyst for entrepreneurship development in contemporary Nigeria. *AKSUJACOG*, *1*(3), 55-68.

Umoh, S., Atakpo, U., Andrew-Essien, E., & Okono, U. (2024). Indigenous Makeup in Theatre Arts: Traditional Plants as Alternative Resources and Prospects for Nigeria's Economy. *AKSUKEL/UTUENIKANG, 5*(1), 97-107.

United Nations. (2022). *E-government survey 2022: The future of digital government*. United Nations Department of Economic and Social Affairs.

World Bank. (2020). *Digital government and service delivery report*. World Bank Publications.

World Bank. (2021). *World development report 2021: Data for better lives*. World Bank Publications.