Greener Journal of Economics and Accountancy
Vol. 13(1), pp. 14-28, 2025
ISSN: 2354-2357

https://gjournals.org/GJEA
DOI: https://doi.org/10.15580/gjea.2026.1.061926091

The Governance Dividends of Digital Transformation in Nigeria: A Fully Modified Ordinary Least Square (FM-OLS) analysis.

Muhammed A. Obomeghie

Department of Statistics, Auchi Polytechnic, Auchi, Edo State, Nigeria.

ABSTRACT

The intersection of digital transformation and governance has emerged as a key focus in public administration and development research, especially within developing nations. This research investigates the effects of digital transformation on governance dividends in Nigeria. Data was collected from secondary sources, including the World Development Indicators and the Central Bank of Nigeria databases, the data is from the years 2005 to 2024. The work employed the Fully Modified Ordinary Least Square (FM-OLS) method to analyze the collected data. The results reveal a statistically significant connection between both digital transformation indicators, internet usage (ITU) and internet access (ITACES), and government effectiveness. Notably, internet usage demonstrates a negative effect on government efficiency, whereas internet access positively contributes to enhancing government effectiveness. The study found that factors like economic growth and human capital development were negatively correlated with government effectiveness. This suggests that Nigerian governments should prioritize expanding e-government initiatives. by digitizing areas like public services, tax collection, procurement, and complaint handling, the study further recommends that effective digital transformation can leverage the growing internet usage to improve governance. As well, governments should continue to invest in broadband networks, fibre-optic infrastructure, and mobile internet coverage, particularly in underserved rural and remote areas because improved connectivity enhances equitable access to digital public services.

ARTICLE'S INFO

Article No.: *061926091*
Type**:** *Research*
Full Text: *PDF, PHP, HTML, EPUB, MP3*
DOI: *10.15580/gjea.2026.1.061926091*

Accepted: *20/06/2026*
Published: *30/06/2026*

Keywords: *Digital Transformation, Governance dividends, Government effectiveness, Internet usage, Economic growth*

Corresponding Author

Muhammed A. Obomeghie

E-mail: *maoisdg@yahoo.com*

Phone: +2348037719420

Article's QR code

INTRODUCTION

Digital transformation has emerged as an essential tool for advancing governance outcomes in both advanced and emerging nations. This process entails the incorporation of digital technologies into government functions to boost efficiency, accountability, transparency, and citizen involvement. Contemporary digital government initiatives go beyond simply implementing information and communication technologies to fundamentally changing public institutions and service delivery models. The Organisation for Economic Co-operation and Development (OECD) (2024) emphasizes that digital governance can enhance the openness, innovation, participation, and reliability of public institutions, while also improving policy efficacy and administrative operations.

In Nigeria, digital transformation has attracted significant governmental focus as a means to tackle persistent governance issues, including weak public service delivery, bureaucratic delays, and insufficient citizen engagement. The country's digital reform initiatives are powered by programs like the National Digital Economy Policy and Strategy (NDEPS), the Treasury Single Account (TSA), the Integrated Payroll and Personnel Information System (IPPIS), the Government Integrated Financial Management Information System (GIFMIS), and various digital identity initiatives. These reforms aim to boost public sector accountability, enhance financial transparency, and make government services more accessible (Nwambuko et al, 2025).

The benefits of digital transformation in governance are becoming clearer in Nigeria. Digital platforms have led to better revenue collection, streamlined administrative processes, improved financial oversight, and broader access for citizens to government services and information. Moreover, digital technologies have the capability to enhance the effectiveness of institutions, increase openness, and encourage higher levels of public trust in government. Nevertheless, obstacles such as insufficient digital infrastructure, limited digital skills, cybersecurity threats, and the digital divide persist, hindering the achievement of these advantages.

Problem Statement

Despite significant investments in initiatives for digital governance such as the Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and the National Digital Economy Policy and Strategy (NDEPS), governance challenges in Nigeria remain. Issues related to corruption, bureaucratic inefficiency, ineffective public service delivery, a lack of transparency, and low levels of citizen trust continue to weaken the effectiveness of public institutions. Although digital transformation is generally seen as a method to improve transparency, accountability, efficiency, and citizen participation, there is a lack of clear evidence regarding how these digital reforms have resulted in tangible governance improvements in Nigeria. Research indicates that while digital technologies can enhance governance performance, challenges such as insufficient digital infrastructure, low digital literacy, limited institutional capacity, and obstacles in implementation have restricted their success (Filgueiras & Almeida, 2021).

Furthermore, much of the existing literature emphasizes the adoption of e-government and digital service provision, rather than thoroughly exploring the wider governance benefits resulting from digital transformation. Therefore, a detailed study on how digital transformation affects governance outcomes in Nigeria is necessary, especially concerning transparency, public service effectiveness, and government efficiency. Filling this gap is key to guiding policy choices aimed at utilizing digital technologies to enhance governance and promote sustainable growth in Nigeria.

Research Objectives

The objectives of this study are:
To evaluate the impact of internet use on government efficiency in Nigeria.

To analyze how internet access affects the efficiency of the government in Nigeria.

To assess how GDP and HCD influence the effectiveness of the government in Nigeria.

Research Questions

How significantly has internet use enhanced government efficiency in Nigeria?
In what ways has gaining access to internet services affected government efficiency in Nigeria?
What effect do GDP and HCD have on the quality and effectiveness of public service delivery in Nigeria?

LITERATURE REVIEW

Concept insight.

Digital transformation refers to the incorporation of digital tools into the workings of organizations and institutions to significantly enhance processes, service provision, decision-making, and interaction with stakeholders. This includes embracing technologies like artificial intelligence, cloud services, big data analysis, digital identification systems, blockchain, mobile applications, and online platforms to generate value and boost efficiency. More than just the uptake of technology, digital transformation also involves shifts in

organizational culture, governance frameworks, and operational models to fully exploit the advantages of digital innovation (Anggraito et al, 2025).

In the public sector, digital transformation goes beyond simply automating government tasks to redesigning governance processes, the ways public services are delivered, and the relationships between citizens and the government. Its aim is to foster a government that is more agile, transparent, responsible, and focused on the needs of citizens. Therefore, digital transformation marks a transition from traditional bureaucratic governance to systems that are driven by data and supported by technology. The Organisation for Economic Co-operation and Development (OECD) (2020) states that digital government utilizes digital tools and data to deliver public benefits, enhance policy outcomes, and build public confidence in institutions. Consequently, this transformation is both technological and institutional, necessitating aligned reforms in governance frameworks and administrative practices.

Concept of digital governance

Digital governance refers to the use of digital technologies in the oversight of public matters and the provision of government services. This includes employing information and communication technologies (ICTs) to boost governmental efficacy, transparency, accountability, and citizen involvement. Digital governance signifies a shift from conventional e-government projects to more holistic, collaborative, and citizen-focused governance approaches (Idzi & Gomes, 2022).

Digital governance consists of various aspects, including:

i Digital Service Delivery – offering public services via online platforms.

ii Digital Participation – allowing citizens to take part in governance through digital means.

iii Digital Transparency – sharing government information via digital systems.

iv Digital Accountability – overseeing public institutions through electronic systems and data-oriented evaluations.

v Digital Collaboration – unifying government entities and stakeholders on common digital platforms.

In Nigeria, instances of digital governance efforts comprise the Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMIS), Integrated Payroll and Personnel Information System (IPPIS), Bank Verification Number (BVN), National Identity Number (NIN), and the Open Treasury Portal. These efforts aim to enhance public financial management, curb corruption, and boost government effectiveness.

Concept of governance dividends

The notion of governance dividends pertains to the beneficial outcomes that result from advancements in governance systems and institutional performance. In relation to digital transformation, governance dividends symbolize the benefits realized through the integration of digital technologies in public administration and governance practices (Debadatta & Pradiptarathi, 2022).

These dividends include; greater transparency, enhanced accountability, Improved efficiency in public administration, superior public service delivery, diminished corruption, increased citizen engagement, reinforced public trust, and stronger policy implementation and oversight. The governance dividend viewpoint posits that spending on digital technology leads to observable enhancements in the quality of governance and the effectiveness of institutions. Digital tools create trails that can be audited, streamline administrative tasks, promote the sharing of information, and lessen the chances for misuse of authority in public office. As a result, governance results are more consistent, clear, and effective (Debadatta & Pradiptarathi, 2022).

According to Hanna (2024), the dimensions of governance dividends resulting from digital change in Nigeria include;

Transparency dividend.

This is one of the key advantages of digital change in governance is transparency. Digital systems allow for open access to government data, budget details, procurement documents, and reports on public spending. With information being easily available, digital channels help diminish the gap in knowledge between government bodies and the public. In Nigeria, programs like the Open Treasury Portal (OTP) and Treasury Single Account (TSA) have enhanced transparency in managing public finances by allowing real-time tracking of government transactions and curbing financial misappropriation. These digital transparency measures boost public oversight and encourage greater trust in government entities.

Accountability dividend.

Digital transformation improves accountability by generating electronic records that aid in monitoring, auditing, and assessing performance. Automated systems limit chances for manipulation and make public officials more responsible for their conduct. Research focused on Nigeria shows that e-governance projects have considerably advanced public accountability through better financial reporting, payroll oversight, and revenue management. Tools such as IPPIS and GIFMIS have played a role in reducing the number of ghost workers and reinforcing fiscal discipline within government bodies.

Efficiency dividend.

Digital technologies simplify administrative tasks and eliminate bureaucratic delays. Automation cuts down on paperwork, accelerates service delivery times, and reduces transaction expenses. The efficiency dividend is especially noticeable in digital payment methods, tax administration, identity management, and the processes for registering businesses. These advancements lead to improved government functionality and more effective use of public funds.

Public service delivery dividend.

Digital transformation enhances the quality, accessibility, and responsiveness of public services. Citizens can access services online without needing to visit government offices in person, which reduces delays and administrative hassles. Nigeria's digital efforts in tax collection, passport application, business registration, and social intervention initiatives highlight the potential for digital governance to improve service delivery outcomes. However, issues with infrastructure still hinder the complete realization of these advantages.

Citizen participation dividend.

Digital platforms enable greater involvement of citizens in governance by offering methods for communication, consultation, feedback, and engagement in policy-making processes. Social media, online complaint mechanisms, e-petitions, and digital consultations allow for more effective interaction between citizens and public agencies. Increased engagement enhances democratic governance and boosts responsiveness to policy matters.

Anti-corruption dividend.

A highly recognized benefit of digital transformation is its ability to reduce corruption. Automated systems decrease direct interactions between citizens and official representatives, thereby lowering opportunities for bribery and arbitrary decision-making. Research on Nigeria's digital governance reforms indicates that digital transformation can greatly reduce corruption by improving transparency, accountability, and tracking of government transactions. Nonetheless, inadequate infrastructure and institutional resistance still pose challenges that limit the success of anti-corruption initiatives.

Challenges to realizing governance dividends in Nigeria

Despite its potential benefits, numerous challenges prevent the benefits of digital governance from being fully realized in Nigeria such as, insufficient digital infrastructure and internet connectivity. Unreliable power supply. Limited digital skills. Concerns regarding cybersecurity and data protection. Institutional reluctance to adapt. Disjointed government data systems. Insufficient regulatory and legal frameworks. Ongoing corruption and governance issues (Das Mohapatra & Panda, 2022). These obstacles indicate that simply implementing digital solutions will not automatically lead to better governance results. Additional institutional changes, regulatory enhancements, and funding for digital infrastructure are required to fully harness governance advantages.

Theoretical insight.

The study of governance benefits from digital transformation in Nigeria can be based on several related theoretical viewpoints that describe how digital technologies affect governance quality, institutional efficiency, transparency, accountability, and citizen involvement.

Digital Government Theory

Digital government theory explains how strategic adoption of digital technologies can enhance public management, service provision, transparency, accountability, and citizen involvement. The theory has developed through the insights of various scholars rather than having a single creator. One of its prominent advocates is Fountain (2001), who, in his work “Building the Virtual State,” introduced the framework of technology enactment, asserting that the effectiveness of digital government relies on the interplay between technology and institutional frameworks rather than on technology alone. Similarly, Heeks (2006) emphasized that successful implementation of digital government necessitates aligning technological design with institutional realities, especially in developing nations.

Digital government theory has wide ranging applications in studies of public administration and governance. It establishes a framework for illustrating how digital technologies can boost government efficiency by optimizing administrative tasks, enhancing service provision, increasing transparency, fortifying accountability, minimizing corruption, and promoting citizen involvement. The theory is frequently used in research regarding e-government, digital public services, regulatory effectiveness, public financial management, smart governance, and evidence-based policy development. It is also becoming increasingly relevant for analyzing how emerging technologies like artificial intelligence, blockchain, and big data can enhance decision-making, public sector productivity, and governance results. In developing countries like Nigeria, the theory provides a useful framework to investigate the links between digital transformation and governance measures, including government effectiveness, regulatory standards, corruption control, and public service provision (Busch, 2024).

Although digital government theory has its advantages, it has been met with various critiques. One

significant critique is its inclination towards technological determinism, where technology is often seen as the main factor driving improvements in governance, overlooking the roles of political leadership, the quality of institutions, legal structures, and organizational culture. Critics also point out that the theory doesn't adequately address the digital divide, as unequal access to digital tools, internet availability, electricity, and digital skills can hinder numerous citizens from benefitting from digital government projects. Other objections include the high costs of implementing and maintaining digital technologies, the risks associated with cybersecurity and data privacy, resistance to change within public entities, and the limited success of digital reforms in settings marked by weak institutions, corruption, or a lack of human capability. As a result, academics generally concur that merely having digital technologies does not ensure better governance; rather, their success relies on supportive institutional conditions, political will, regulations, and investments in both human and technological capabilities (Zhang, & Kaur, 2024).

Good Governance Theory (GGT)

The concept of good governance theory came into being during the late 1980s and early 1990s as a guideline for enhancing public sector performance, encouraging sustainable development, and fortifying democratic institutions. It is not credited to a single individual; instead, it was mainly shaped and pushed forward by international development organizations and governance researchers. The World Bank (1992) first brought the idea to prominence in its 1992 document Governance and Development, asserting that effective governance is crucial for economic advancement and reducing poverty. Later, the United Nations Development Programme (1997) broadened the framework by pinpointing participation, transparency, accountability, responsiveness, equity, effectiveness and efficiency, rule of law, and strategic vision as the essential traits of good governance. The research by Kaufmann et al. (2010) significantly reinforced the theory through the creation of the Worldwide Governance Indicators (WGI), which assess governance across six aspects: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. These indicators are still among the most commonly used measures of governance quality in research.

Good governance theory has broad applications in fields such as public administration, development economics, political science, and institutional analysis. It offers a theoretical foundation for exploring how the quality of institutions affects economic development, investment, poverty alleviation, and public service provision. Researchers often use the theory to analyze government efficiency, regulatory quality, measures against corruption, fiscal management, judicial independence, democratic accountability, and reforms in the public sector. It is also commonly utilized in research looking into the connections between governance and sustainable development, digital changes, environmental management, and institutional resilience. In developing nations like Nigeria, the theory serves as a useful framework for examining how advancements in transparency, accountability, regulatory standards, and government efficiency can enhance economic growth, institutional performance, and citizen welfare (Woleola 2017).

Despite its broad acceptance, GGT has faced considerable criticism. A key point of contention is that it embodies a normative and often Western-centric model of governance, presuming that institutional setups effective in developed nations can be applied universally. Critics point out that this "one-size-fits-all" strategy ignores the unique historical, cultural, political, and socio-economic contexts of developing nations. Others argue that international financial organizations have often linked good governance reforms to funding and assistance, making the concept seem more like a policy requirement than a neutral theory grounded in evidence. As a result, numerous modern researchers promote a more context-aware or "good enough governance" methodology that emphasizes institutional reforms based on each nation's specific development requirements and governance abilities instead of chasing idealized standards for governance (Agama et al, 2022).

Diffusion of Innovation (DOI)

The theory serves as a significant framework for understanding the manner in which new concepts, technologies, products, or practices propagate through a social system over time. This theory was first developed and refined by Rogers (2003). He combined insights from various fields such as sociology, communication, marketing, rural development, and public health to clarify why certain innovations are embraced faster than others. As per the theory, the diffusion process is determined by four main components: the innovation itself, methods of communication, time, and the social structure. Additionally, Rogers contended that the pace of adoption relies on five perceived qualities of an innovation, which include; relative advantage, compatibility, complexity, trialability, and observability. Furthermore, adopters can be grouped into five categories: innovators, early adopters, early majority, late majority, and laggards. Following this, researchers like Valente in 1995 broadened the theory by looking into how social networks and personal influences help speed up the diffusion of innovation. Recent research continues to utilize DOI Theory for insights into digital innovation, artificial intelligence, digital transformation, e-government, financial technology, healthcare technologies, and sustainable innovations.

Diffusion of innovation theory has broad applications across many academic fields and policy areas. In the field of information systems, it offers a structure for exploring the adoption of digital tech such as cloud computing, artificial intelligence, blockchain,

mobile banking, and enterprise information systems. In public administration, the theory is commonly utilized to clarify the spread of e-government projects, online public services, and digital governance changes within governmental institutions. Within development studies, DOI theory aids in explaining how innovations enhance economic development, agricultural advancement, public health efforts, and educational technology. More recently, academics have applied the theory to explore strategies for digital transformation in both public and private sectors, stressing that successful adoption relies not only on tech features but also on organizational preparedness, institutional backing, leadership dedication, and acceptance by users. Therefore, DOI theory continues to be among the most widely used theoretical models for empirical research on digital transformation and innovation adoption (Pamungkas et al 2025).

Despite its enduring relevance, diffusion of innovation theory faces various critiques. A primary concern is that the theory presumes a relatively straightforward and sequential process of diffusion, while in current digital contexts, technology adoption is typically iterative, dynamic, and affected by swift technological progress. Critics also point out that the theory places too much emphasis on innovation traits while neglecting the organizational, institutional, political, and economic elements that influence adoption choices. Another concern is its limited approach to power dynamics, inequality, and resource limitations, especially in developing nations where poor infrastructure, weak institutions, and digital gaps profoundly affect innovation diffusion (Das 2022).

Institutional Theory

This represents a significant theoretical viewpoint in the fields of organizational studies, sociology, political science, public administration, and management. It illustrates how organizations are influenced by both formal and informal institutions where they function. Instead of operating only on the principles of economic efficiency or logical decision-making, organizations establish frameworks, policies, and practices that align with the existing rules, norms, cultural anticipations, and societal beliefs, seeking to establish legitimacy, stability, and long-term continuation. The concept has transitioned from "Old Institutionalism," which was initiated by Philip Selznick, to "New Institutionalism," introduced by John W. Meyer, Brian Rowan, Paul J. DiMaggio, Walter W. Powell, and later integrated by Scott in 2014. Current institutional studies have progressed further through ideas like institutional logics, entrepreneurship within institutions, and the work related to institutions, revealing the increasingly fluid nature of organizational surroundings.

Institutional theory is applicable in many areas of organizational and governance investigation. In public administration, it clarifies why governments pursue reforms such as e-government initiatives, digital advancements, public financial management systems, and anti-corruption strategies driven by legal mandates, professional expectations, and societal norms. In the realm of business and management, this theory is applied to analyze organizational legitimacy, governance among corporations, corporate social responsibility, sustainability reports, and practices related to environmental, social, and governance (ESG), as well as innovation and strategic choices. In information systems research, institutional theory aids in understanding why organizations take on new technologies like artificial intelligence, cloud services, blockchain, and digital platforms, often due to coercive influences (government regulations), normative influences (professional standards), and mimetic influences (replicating successful organizations). Therefore, the theory has gained importance in studies regarding digital transformation, where the adoption of digital technologies by organizations is viewed more as a result of institutional circumstances rather than purely technological abilities. Recent research also showcases its increasing use in areas such as sustainability, entrepreneurship, public policy, and governance analysis (Eitrem et al, 2024).

Despite its broad application, Institutional theory has faced various criticisms. A major critique is that it often places too much emphasis on institutional conformity and organizational stability, while failing to recognize organizational autonomy, innovation, and strategic decision-making. Detractors claim that it depicts organizations as merely passive recipients of institutional influences instead of active agents who can reshape their institutional contexts. Another critique highlights the theory's restricted capacity to account for swift organizational changes, especially in high-speed digital environments where technological disruptions frequently outstrip the ability of institutions to adapt (Herman & Inna 2020).

Dynamic Capabilities Theory (DCT)

This theory is one of the key concepts in strategic management, organizational development, and transformation in the digital realm. It describes how businesses gain and maintain a competitive edge in swiftly evolving markets by enhancing their ability to integrate, develop, and reorganize both internal and external resources. The theory arises from the Resource-Based View (RBV), which highlights the importance of valuable resources within a company but does not fully clarify how entities adjust to disruptions in technology and uncertain environmental factors. The foundation work of Teece et al, (1997) characterized dynamic capabilities as an organization’s proficiency in combining, developing, and restructuring skill sets to respond to quickly changing conditions. Teece (2020) refined the theory by introducing the framework of sensing, seizing, and transforming (or reconfiguring), showcasing how organizations spot opportunities,

allocate resources, and continually enhance their abilities to uphold performance.

The dynamic capabilities theory has a broad range of uses in strategic management, information systems, public sector management, and studies on innovation. It is frequently used to examine how businesses adapt to technological upheavals by leveraging digital transformation, artificial intelligence, cloud technology, big data, blockchain, and Industry 4.0 technologies. Within business research, this theory illustrates how organizations cultivate innovative capabilities, learn organizationally, manage knowledge, and remain strategically flexible in order to keep a competitive edge. In the public sector, its application has risen to scrutinize how governments enhance their institutional capacities to execute digital government projects, elevate public service delivery, bolster governance, and address crises. Current research also applies the theory in areas like sustainability, entrepreneurship, healthcare, international commerce, and supply chain fortitude. In studies focused on digital transformation, this theory offers a helpful framework for grasping how firms consistently adjust their resources, skills, and methodologies in response to rapidly evolving technologies and institutional frameworks. Recent assessments show that this theory continues to be a leading viewpoint for evaluating how organizations adapt and innovate digitally (Liu 2022).

Nevertheless, dynamic capabilities theory has faced various critiques. A main critique is the ambiguity surrounding the precise definition of dynamic capability, leading to overlapping descriptions with related ideas such as organizational learning, strategic flexibility, and absorptive capacity. Detractors also claim that the theory is hard to implement empirically since dynamic capabilities are abstract and difficult to quantify reliably across organizations. Another point of criticism is that the theory tends to focus on successful adaptations without thoroughly explaining why certain organizations struggle to create or utilize dynamic capabilities even in similar environmental circumstances (Gremme & Veit, 2017).

Empirical Review:

Findings from both advanced and emerging nations indicate that digital governance programs can yield considerable governance benefits when they are backed by suitable institutional and technological frameworks.

A structured evaluation of digital government transformation conducted by Alenezi (2022) revealed that digital advancements enhance the effectiveness of the public sector, citizen involvement, execution of policies, and the delivery of services. The research also noted that effective digital transformation relies on well-thought-out planning, digital skills, commitment from leadership, and readiness within institutions. Similarly, Ciancarini et al, (2023) argued that digital changes in public management lead to better governance results by improving how data is handled, boosting digital competencies, fostering nimble administrative operations, and enhancing service delivery through technology. Their study highlighted that the transformation is not only about technology but also involves organizational and institutional aspects.

Previous research on e-government transformation indicated that implementing digital identity solutions, unified information systems, and online governmental services greatly enhances administrative coordination, accountability, and access for citizens to public services. A notable analysis of Nigeria's digital governance was carried out by Shenkoya (2023). This research, adopting a systematic review and bibliometric analysis approach, evaluated if digital transformation could enhance transparency and accountability within Nigerian governance. The results showed that digital tools effectively help to minimize corruption, boost transparency, and reinforce accountability frameworks. However, the research also pointed out significant challenges including weak digital infrastructure, insufficient inter-agency data sharing, and low internet access that hinder these advantages.

The research concluded that digital transformation possesses considerable potential to elevate the quality of governance in Nigeria by reducing arbitrary decision-making, establishing audit trails, and enhancing public access to governmental information. Nwambuko in 2025 explored how digital governance and e-government transformation influence the delivery of public services in Nigeria, utilizing survey data gathered from federal ministries and citizens using government platforms. The study applied descriptive statistics, correlation analysis, and multiple regression methods. The results indicated that initiatives in digital governance markedly advanced administrative efficiency, transparency, and accountability through systems like TSA, IPPIS, and GIFMIS. Additionally, the study found that digital reforms alleviated bureaucratic obstacles and improved access to government services. Nonetheless, limitations such as weak ICT infrastructure, low levels of digital literacy, and ongoing corruption persisted as challenges to the success of these reforms.

In a similar vein, Nwokoroeze, Onwuekwem, & Chukwu (2025) assessed the effects of e-government and digital transformation on public service quality in Nigeria. Their findings showed that digital governance contributes to service efficiency, transparency, accountability, and cost-effectiveness within governmental operations. The authors contended that digital technologies enhance governance by enabling faster service provision, diminishing administrative delays, and fostering better communications between citizens and government agencies.

Numerous studies have examined digital public financial management systems as tools for improving governance. Research analyzing the implementation of TSA, IPPIS, and GIFMIS indicated that these reforms enhanced financial accountability by curbing waste in government spending, eliminating fictitious employees, and refining payroll management systems. The studies concluded that digital financial management systems

play a vital role in promoting fiscal discipline and transparency within public administration (Paul & Malachy, 2025).

Asoya (2025) examined the possibilities and difficulties linked to digital governance in Nigeria. Utilizing survey data from public officials and analysis of documents, the investigation revealed that digital governance greatly improves administrative efficiency through the automation of service delivery methods, minimization of paperwork, reduction of time for processing, and enhancement of communication between government bodies and the public. The study also indicated that digital governance lowers transaction expenses and boosts institutional reactivity. These results align with the wider literature on digital government, which contends that governance systems enabled by technology enhance operational effectiveness and organizational performance via process automation and unified information management systems.

Empirical research strongly backs the idea that digital transformation yields significant governance benefits through enhanced transparency, accountability, public service provision, financial oversight, administrative efficiency, and citizen involvement. However, despite these successes, the research consistently pinpoints a number of challenges, including insufficient ICT infrastructure, low levels of digital literacy, cybersecurity threats, disjointed databases, institutional resistance, and weak frameworks for policy execution. These issues persist in hindering the full exploitation of governance advantages in Nigeria resulting from digital transformation.

In addition, many existing studies concentrate on specific aspects of digital governance, like transparency, accountability, or public service provision, rather than delivering a complete evaluation of the broader governance advantages stemming from digital transformation. This creates a significant gap in knowledge that demands further empirical examination of the overall effects of digital transformation on governance results in Nigeria.

Gaps in the Previous Literature

Theoretical Gap

An examination of existing literature indicates that research on digital transformation and governance in Nigeria tends to be scattered in its theoretical underpinnings. The majority of available studies depend on theories such as the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Institutional Theory, and E-Government Theory to elucidate the uptake and execution of digital technologies within public administration. These theories mainly emphasize technology acceptance, organizational preparedness, and institutional adaptation, rather than detailing how digital transformation leads to wider governance results like transparency, accountability, effectiveness, citizen involvement, and public trust.

Moreover, the broader literature on digital transformation has come under scrutiny for lacking a unified theoretical base, leading to conceptual uncertainty regarding how digital technologies yield institutional and governance outcomes. A systematic review conducted by Egodawele et al. (2022) revealed that research in digital transformation remains theoretically fragmented and displays inconsistent definitions.

Thus, this study aims to bridge the theoretical gap by combining Digital Government Theory and Good Governance Theory to offer a more thorough explanation of how digital transformation affects governance results in Nigeria. This integration fosters a greater understanding of the methods through which digital technologies support transparency, accountability, service provision, and the effectiveness of government.

Empirical Gap

Many empirical investigations concentrate on specific governance results like transparency, accountability, the reduction of corruption, or the delivery of public services. For example, Shenkoya (2023) mainly focused on transparency and accountability, whereas other research looked at public service delivery and the efficiency of administration. However, governance is a complex idea that includes transparency, accountability, effectiveness, responsiveness, citizen involvement, and the quality of institutions. There are few studies that have fully evaluated the overall benefits of governance arising from digital transformation. Consequently, the available evidence only offers a limited understanding of the connection between digital transformation and governance results in Nigeria. This research aims to address this issue by exploring governance benefits from a wider angle rather than concentrating on a single governance measure.

Methodological gap

The majority of Nigerian research on digital governance uses qualitative techniques, systematic reviews of the literature, descriptive analysis, or surveys based on perceptions. For instance, Shenkoya (2023) employed a systematic literature review and a bibliometric method, while many recent studies heavily depended on survey insights from public officials and citizens. Even though these methods provide important viewpoints, they frequently lack a thorough quantitative evaluation of the cause-and-effect relationship between digital transformation and governance results. There is a scarce application of advanced econometric approaches that can determine both long-term and short-term links between digitalization metrics and indicators of governance performance. This study aims to close a methodological gap by using a stronger empirical

framework to analyze the governance impacts of digital transformation.

Time-dimension gap

Numerous existing studies draw on cross-sectional data and consequently offer only a limited view of digital governance outcomes. Such studies fail to capture the evolving impacts of digital transformation over time. Since governance reforms and digital transformation initiatives progress gradually, their effects may not be clear until later on. Thus, there is a need for longitudinal research that investigates how ongoing investments in digital transformation affect governance outcomes across various time periods.

MATERIALS AND METHODS

Research Design

This study employs an explanatory research design that uses a quantitative time-series method to explore the governance benefits of digital transformation in Nigeria. The explanatory framework is suitable as it aims to explore the cause-and-effect relationship between digital transformation and governance effectiveness, as well as government effectiveness and public service delivery. Explanatory research is appropriate when the goal is to analyze how modifications in the independent variable impact a dependent variable over a period.

The research utilizes annual secondary data collected from reliable sources such as the World Governance Indicators (WGI), World Development Indicators (WDI), International Telecommunication Union (ITU), and the United Nations E-Government Development Database. Digital transformation might be represented by indicators like internet penetration and mobile subscriptions, while governance outcomes can be evaluated using governance metrics such as government effectiveness.

To estimate the long-run connection between digital transformation and governance outcomes, this research utilizes the Fully-Modified Ordinary Least Squares (FM-OLS) method. Prior to estimating the FM-OLS model, unit root tests, including the Augmented Dickey-Fuller (ADF) tests, will be carried out to identify the order of integration for the variables. Following this, cointegration tests will be executed to confirm whether a long-term equilibrium relationship exists among the variables. Once cointegration is established, the FM-OLS model will be estimated to analyze the long-term effects of digital transformation on governance outcomes in Nigeria. This method is considered robust due to its ability to tackle issues related to endogeneity, serial correlation, and small-sample bias that are typically encountered in macroeconomic time-series data.

Econometric Model Specification

To examine the governance dividends of digital transformation in Nigeria, the study specifies a Fully Modified Ordinary Least Squares (FM-OLS) model in which government effectiveness are modeled as a function of digital transformation and other control variables that influence government effectiveness.

The functional relationship is expressed as:

$$\mathrm{GEF_t} = \mathrm{f}(\mathrm{ITU_t}, \mathrm{ITACES_t}, \mathrm{SUST_t}, \mathrm{HCD_t}, \mathrm{GDP_t})$$

Where:

GEF= Government Effectiveness.
$\mathrm{ITU_t}$, = Internet usage
$\mathrm{ITACES_t}$, = Internet access
$\mathrm{SUST_t}$ = Environmental sustainability
$\mathrm{GDP_t}$ = Gross Domestic Product
t= Time period
The econometric form of the model is specified as:

$$\mathrm{GEF_t} = \beta_0 + \beta_1 \mathrm{ITU_t} + \beta_2 \mathrm{ITACES_t} + \beta_3 \mathrm{SUST_t} + \beta_4 \mathrm{HCD_t} + \beta_5 \mathrm{GDP_t} + \mu_t$$

This implies that improvements in digital transformation, economic development, education, urbanization, and political stability are expected to enhance governance outcomes in Nigeria.

Model for the Study

Where the study specifically focuses on the governance dividends of digital transformation, a more parsimonious model may be specified as:

Estimated FMOLS Model

$$\mathrm{GEF} = \beta_0 + \beta_1 \mathrm{SUST} + \beta_2 \mathrm{ITU} + \beta_3 \mathrm{ITACES} + \beta_4 \mathrm{HCD} + \beta_5 \mathrm{GDP} + \varepsilon$$

Where:

Government Effectiveness (GEF): is the measure of how well a government can create and carry out effective policies, provide high-quality public services, uphold a skilled and independent civil service, and guarantee that governmental promises are trustworthy and carried out properly.

Environmental sustainability (SUST): means managing and safeguarding natural resources and ecosystems responsibly to ensure environmental health is preserved for both current and future generations. It focuses on finding a balance between economic growth, social welfare, and environmental protection by reducing resource depletion, pollution, loss of biodiversity, and damage to ecosystems.

Gross Domestic Product (GDP): is the aggregate monetary worth of all final goods and services generated within a nation's borders over a certain timeframe, typically a quarter or a year. It serves as the most commonly utilized measure of a nation's overall

economic health, reflecting the size and expansion of its economy.

Internet usage (ITU); is the degree to which individuals, households, commercial entities, or organizations use and engage with the internet for communication, information gathering, business transactions, access to public services, and various social, educational, and economic functions. It is typically quantified as the proportion of a nation's population using the internet, number of internet subscriptions, broadband coverage, or the frequency and intensity of internet activity.

Internet access (ITACES): describes the accessibility and capacity of individuals, households, businesses, and institutions to connect and make use of the internet through communication technologies such as fixed broadband, mobile broadband, satellite, fiber-optic systems, or wireless connections. It includes both the existence of internet infrastructure and the affordability, quality, and dependability of internet services.

RESULTS AND DISCUSSIONS

The descriptive statistics of our analysis is presented below in table 1.

Table 1. Descriptive statistics.

	GEF	ITU	ITACES	HCD	GDP	SUST
Mean	-1.052632	20.59428	20.58421	0.512632	1.235541	8.742105
Median	-1.040000	21.00000	21.00000	0.512000	2.158314	7.400000
Maximum	-0.870000	40.06400	40.10000	0.561000	5.067183	17.00000
Minimum	-1.210000	3.549156	3.500000	0.481000	-8.342423	1.900000
Std. Dev.	0.097800	11.54238	11.54312	0.025615	3.357991	4.672177
Skewness	-0.044751	0.157949	0.157501	0.360534	-1.314221	0.168329
Kurtosis	2.208440	1.855329	1.858343	1.959877	4.566032	1.715850
Jarque-Bera	0.502374	1.116300	1.110398	1.268088	7.410918	1.395217
Probability	0.777877	0.572267	0.573958	0.530442	0.024589	0.497774
Sum	-20.00000	391.2914	391.1000	9.740000	23.47527	166.1000
Sum Sq. Dev.	0.172168	2398.078	2398.385	0.011810	202.9698	392.9263
Observations	19	19	19	19	19	19

Source; Author's computation from e-views output

From table 1 above, it can be seen that internet usage (ITU) has the highest mean while government effectiveness (GEF) has the lowest mean with 20.59428 and -1.052632 respectively. As well, ITACES has the highest standard deviation while HCD has the lowest standard deviation with 11.54312 and 0.025615 respectively. This indicates that the values for internet usage vary widely across the data set. It also means that, there is a large amount of fluctuation in internet usage among the observations. On the other hand, HCD with the lowest standard deviation means that, the values for the HCD are relatively stable and consistent across the data set.

Table 2. Stationarity test.

Variable	Order	ADF value	Prob	Conclusion
GDP	I (I)	-4.498124	0.0030	Stationary
GEF	I (0)	-4.028890	0.0066	Stationary
HCD	I (I)	-3.285910	0.0334	Stationary
ITU	I (I)	-3.419345	0.0250	Stationary
ITACE	I (I)	-3.433204	0.0243	Stationary

Source; Author's computation from e-views output

From table 2, it can be observed that all the variables used in the analysis are stationary at first difference except GEF which is stationary at levels. If values are stationary, it means that they do not change or fluctuate over time. In statistical and analytical contexts, stationarity has specific implications for empirical analysis which includes;

Predictability and stability; Since values remain constant over time, future values can be reliably predicted based on past data. This stability simplifies modeling and

forecasting because the underlying data distribution does not change.

Simplified analysis: Many statistical techniques, such as regression analysis and time series modeling, require stationarity to produce valid results. Non-stationary data can lead to spurious correlations, so stationarity ensures more accurate and meaningful analysis.

No trends or cycles; Stationary data lack trends, seasonal effects or cycles, meaning that the mean and variance are constant. This implies a steady environment without significant shifts or long-term changes.

Table 3. Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.625254	Prob. F(2,9)	0.2497
Obs*R-squared	4.776058	Prob. Chi-Square(2)	0.0918

Source: Author's computation from e-views output

The Breusch–Godfrey Serial Correlation LM Test was conducted to examine whether the residuals were serially correlated. The results show an F-statistic of 1.625254 with a probability value of 0.2497, and an Obs*R-squared statistic of 4.776058 with a probability value of 0.0918. Since both probability values exceed the conventional 5% significance level, the null hypothesis of no serial correlation cannot be rejected. Therefore, the residuals are not serially correlated, indicating that the estimated model satisfies the assumption of independent errors

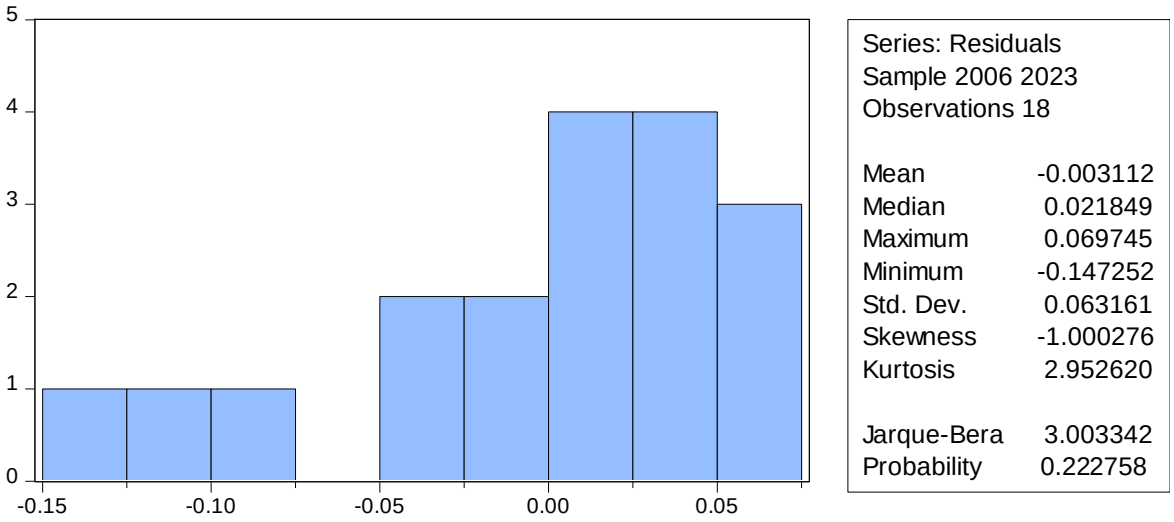

Fig. 1. Normality test.
Source; *Author's computation from e-views output*

From figure 1 which depicts the normality test, the Jarque-Bera value of 3.003342 with a corresponding probability of 0.222758, indicates that the variables used are normally distributed. The implications of normal distribution in econometric analysis include;

Validity of statistical inference; Many inferential statistics, such as t-tests and F-tests, rely on the assumption of normality of the error terms or variables. Normality ensures that the sampling distribution of estimators is approximately normal, especially in large samples, enabling valid hypothesis testing and confidence interval construction.

Efficiency and unbiasedness of estimators; Under the assumption of normally distributed variables, the Ordinary Least Squares (OLS) estimators are not only unbiased but also the Best Linear Unbiased Estimators (BLUE). It also helps in verifying the assumptions needed for estimator optimality.
Simplification of model diagnostics; Normality facilitates the use of residual analysis, QQ plots, and other diagnostic tools to assess the goodness of fit. It simplifies the detection of outliers and influential data points.

Applicability of parametric tests: Many parametric tests assume normality; if variables are normally distributed, these tests are more reliable. This includes tests for coefficients, joint hypotheses, and model specifications.

In conclusion, if variables are normally distributed, it generally enhances the validity and reliability of statistical inference in econometric models, simplifies diagnostics, and supports the use of parametric tests.

Table 4, FMOLS estimation output
Dependent Variable: GEF

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SUST	-0.020164	0.005332	-3.781938	0.0026
ITU	-1.526080	0.487491	-3.130480	0.0087
ITACES	1.510148	0.485976	3.107453	0.0091
HCD	9.482532	2.301873	4.119486	0.0014
GDP	-0.011767	0.004896	-2.403533	0.0333
C	-5.382030	1.072619	-5.017655	0.0003
R-squared	0.539280	Mean dependent var		-1.061111
Adjusted R-squared	0.347314	S.D. dependent var		0.093172
S.E. of regression	0.075273	Sum squared resid		0.067992
Long-run variance	0.002431			

Source; *Author's computation from e-views output*

Interpretations

The FM-OLS estimation shows a good level of fit. The R-squared value of 0.539280 indicates that the explanatory variables together account for about 53.93% of the long-term changes in government effectiveness. The regression's standard error, which stands at 0.075273, indicates relatively minor prediction errors, suggesting that the model fits well. Furthermore, the low long-run variance of 0.002431 implies that the FM-OLS estimator has adequately addressed issues of serial correlation and endogeneity, hence delivering dependable and consistent estimates regarding the long-term relationships between the variables.

The findings show that environmental sustainability (SUST) has a negative and significant long-term impact on government effectiveness (β = −0.020164, p = 0.0026). This result signifies that changes in environmental sustainability substantially relate to differences in government effectiveness throughout the study period. Although the negative sign contradicts theoretical expectations stating that environmental sustainability should enhance governance, it could represent institutional weaknesses, the costs of implementing environmental reforms, or constraints in environmental governance. The finding indicates that environmental sustainability by itself is not enough to improve government effectiveness without stronger institutions, effective regulatory systems, and better administrative capacity. This aligns with similar research by Yuan et al. (2025).

Regarding the second independent variable, which is internet users, the results reveal a negative and significant long-term effect on government effectiveness (β = −1.526080, p = 0.0087). While digital technologies are typically thought to improve governance through increased transparency, participation, and delivery of public services, the negative coefficient implies that a rise in internet usage does not inherently enhance institutional performance. This outcome might be due to insufficient digital governance frameworks, limited institutional capacity, unequal access to digital technologies, or heightened public awareness of governance shortcomings. Thus, the governance advantages stemming from internet expansion rely not just on digital connectivity but also on additional investments in institutional quality, regulatory efficiency, cybersecurity, and e-government systems. This finding is consistent with the work of Wang et al. (2023).

On the other hand, for the third independent variable, which is internet access, the estimates indicate that internet access has a positive and significant long-term effect on government effectiveness (β = 1.510148, p = 0.0091). This result points out that better internet access improves the quality of public administration, aids effective service delivery, and boosts institutional performance. Enhanced connectivity allows governments to utilize digital platforms for communication, service provision, and policy implementation, ultimately increasing transparency and accountability. This finding supports the notion that digital infrastructure is a critical element of modern governance and highlights the necessity for complementary investments in digital skills, institutional capacity, and cybersecurity to optimize the governance benefits associated with internet access (Wirajing & Nchofoung, 2023).

Regarding evaluations of human capital development, estimates reveal that it has a beneficial and statistically significant long-term impact on the effectiveness of government (β = 9.482532, p = 0.0014). The results imply that investments directed towards education, health, and workforce skills strengthen the ability of governmental bodies to design and execute policies, provide quality public services, and enhance overall institutional performance. The notably high coefficient highlights the essential function of human capital in enhancing governance results. These findings align with human capital theory, which suggests that investing in people boosts productivity, enhances

institutional quality, and fosters ongoing economic and social advancement (Hyeri et al, 2017).

In contrast, when considering GDP, the estimates show a negative and significant long-term influence on government effectiveness ($\beta = -0.011767$, $p = 0.0333$). Though economic growth is typically anticipated to improve governance by increasing fiscal capacity and allowing for more public investments, the negative coefficient indicates that higher GDP does not guarantee better institutional performance. This observation might be indicative of structural challenges, such as limited institutional capability, reliance on resources, unequal economic benefit distribution, and the need for better governance reforms (Trabelsi & Boujelbene, 2024).

CONCLUSION

Given that environmental sustainability demonstrates a negative long-run connection with government effectiveness, this inverse relationship diverges from theoretical assumptions and should be approached with caution. Instead of concluding that environmental sustainability diminishes governance, the findings might suggest that environmental reforms face institutional limitations, entail considerable transition costs, or suffer from inadequate governance support. This outcome also emphasizes the significance of how the sustainability indicator is measured and the wider institutional landscape. Furthermore, the negative long-run relationship between internet users and government effectiveness should not lead to the assumption that using the internet reduces government effectiveness by default. Rather, it suggests that internet use alone does not enhance governance, unless it goes hand in hand with effective digital governance strategies, institutional reforms, and investment in digital public services. Regarding internet access, which shows a positive long-term effect on government effectiveness, one can conclude that improving access to the internet significantly bolsters government efficiency. This indicates that nations with wider internet availability are more inclined to witness enhancements in public service delivery, administrative efficiency, transparency, and institutional performance. Thus, internet access serves as a crucial factor for effective governance and digital transformation. Since human capital development positively influences government effectiveness, it can be concluded that this represents a key approach for enhancing governance and achieving sustainable socioeconomic growth. Lastly, given that GDP negatively affects government effectiveness over the long run, mere economic growth is not enough to enhance government effectiveness. Instead, the advantages derived from growth rely on the strength of institutions, management of the public sector, and governance reforms. Without advances in institutional capability and accountability, GDP growth may not lead to improved public service delivery or more effective governance.

Policy Recommendations

Nigeria policy makers should enhance the capabilities of environmental organizations by boosting finances, training staff, updating technology, and improving oversight systems. Strong institutions are more inclined to enact environmental regulations while maintaining administrative effectiveness. Similarly, Nigerian authorities should broaden e-government efforts by converting public services, licensing processes, tax management, purchasing systems, and public feedback channels into digital formats. A successful digital government can turn higher internet usage into improved governance results. Additionally, governments must keep funding broadband networks, fiber-optic systems, and mobile internet access, especially in neglected rural and isolated regions. Better connectivity promotes fair access to digital public services.

With respect to HCD governments should expand investment in quality education at all levels, including primary, secondary, tertiary, technical, and vocational education. Emphasis should also be placed on science, technology, engineering, and mathematics (STEM) to equip citizens with skills needed for a modern economy and digital government. Finally, economic expansion should be accompanied by reforms that improve public financial management, civil service professionalism, transparency, and accountability. Strong institutions enable governments to convert economic resources into better governance outcomes. A portion of the gains from economic growth should be invested in education, healthcare, digital infrastructure, and innovation. These investments improve the capacity of public institutions and enhance government effectiveness over the long run.

REFERENCES

Agama, C.S, Obiagwu, V.O., Ozoigbo, I.B. (2022). Criticism as a Forerunner of Good Governance: A Philosophical Reflection. *International Journal of Arts, Humanities and Social Studies, 4*(1), 176-180. https://ijahss.in/article/criticism-as-a-forerunner-of-good-governance.

Alenezi, M. (2022). *Understanding Digital Government Transformation*.1-8. DOI:10.48550/arXiv.2202.01797.

Anggraito, K., Lubis, M., Mukti, I.Y. & Fakhrurroja, H. (2025). Digital Transformation: A Framework for Strategic Organizational Transformation. In: Nagar, A., Jat, D.S., Mishra, D., Joshi, A. (eds) Intelligent Sustainable Systems. Worlds4 2024. Lecture Notes in Networks and Systems. 1178. *Springer, Singapore*. https://doi.org/10.1007/978-981-97-9559-8_32.

Asoya, M. C. (2025). Enhancing Public Service Delivery through Digital Governance in Nigeria: A Critical

Analysis of Opportunities and Challenges. International Journal of Global Affairs, Research and Development. 2(2) 205-215. https://ijgard.com/index.php/ijgard/article/view/122.

Busch, P.A. (2024). Theory Development in Digital Government Research: Status and Ways Forward. In: Janssen, M., *et al.* Electronic Government. EGOV 2024. Lecture Notes in Computer Science, vol 14841. Springer, Cham. https://doi.org/10.1007/978-3-031-70274-7_1

Ciancarini, P., Giancarlo, R., & Grimaudo, G. (2023). Digital Transformation in Public Administrations: A Guided Tour for Computer Scientists. *IEEE.* 12 22841-22864. DOI:10.1109/ACCESS.2024.3363075

Das Mohapatra, D., & Panda, P. (2022). Impact of corporate governance on dividend policy: A systematic literature review of last two decades. *Cogent Business & Management*, *9*(1). https://doi.org/10.1080/23311975.2022.2114308.

Das, B. (2022). Diffusion of innovations: Theoretical perspectives and empirical evidence. African Journal of Science, Technology, Innovation and Development, 14(1), 94–103.

Debadatta, D. M. & Pradiptarathi, P. (2022) Impact of corporate governance on dividend policy: A systematic literature review of last two decades, *Cogent Business & Management,* 9(1), 1-18. DOI: 10.1080/23311975.2022.2114308

Egodawele, M., Sedera, D., & Bui, V. (2022). A Systematic Review of Digital Transformation Literature (2013–2021) and the Development of an Overarching Apriori Model to Guide Future Research. 1-12. *ACIS 2022 Proceedings.* 89. https://aisel.aisnet.org/acis2022/89 DOI:10.48550/arXiv.2212.03867

Eitrem, A., Meidell, A., & Modell, S. (2024). The use of institutional theory in social and environmental accounting research: a critical review. Accounting and Business Research, 54(7), 775–810. https://doi.org/10.1080/00014788.2024.2328934.

Filgueiras, F. & Almeida, V. (2021). Digital Technologies for Governance. In: Governance for the Digital World. *Palgrave Macmillan, Cham*. https://doi.org/10.1007/978-3-030-55248-0_3.

Fountain, J. E. (2001). Building the Virtual State: Information Technology and Institutional Change. Brookings Institution Press.

Gremme, K. & Veit, W.(2017). Dynamic capabilities: a systematic literature review of theory and practice. European Journal of Management Issues 25(1):30-35. DOI:10.15421/191705

Hanna, N.K. (2024). Mastering Transformation and Digital Dividends. In: Driving Digital Transformation in Developing Nations. *Palgrave Macmillan, Cham.* https://doi.org/10.1007/978-3-031-54573-3_8

Heeks, R. (2003). Most eGovernment-for-Development Projects Fail: How Can Risks be Reduced? Institute for Development Policy and Management, University of Manchester.

Herman, A. & Inna, T. (2020). How institutional theories explain and fail to explain organizations. Journal of Organizational Change Management. 33(7) 1223-1252. https://doi.org/10.1108/JOCM-05-2019-0130.

Hyeri, C., Min J. P. & Jae, J. R. (2017). Two-dimensional approach to governmental excellence for human development in developing countries: Combining policies and institutions with e-government. *Government Information Quarterly. 34*(2) 340-353, https://doi.org/10.1016/j.giq.2017.03.002.

Idzi, F.M. & Gomes, R.C. (2022). Digital governance: government strategies that impact public services. *GPPG 2,* 427–452. https://doi.org/10.1007/s43508-022-00055-w.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2011). The Worldwide Governance Indicators: Methodology and Analytical Issues. *Hague Journal on the Rule of Law, 3*(2), 220–246.

Keping, Y. (2018). Governance and Good Governance: A New Framework for Political Analysis. *Fudan J. Hum. Soc. Sci.* 11, 1–8. https://doi.org/10.1007/s40647-017-0197-4.

Liu, Y. (2022). Dynamic Capabilities: A Theoretical Review and Reflection. In: Li, X., Yuan, C., Kent, J. (eds) Proceedings of the 5th International Conference on Economic Management and Green Development. Applied Economics and Policy Studies. Springer, Singapore. https://doi.org/10.1007/978-981-19-0564-3_26.

North, D. C. (1990). Cambridge University Press.

Nwambuko, T. C.1., Eyikorogha, Q. & Chigozie, J. N. (2025). Digital Governance and E-Government Transformation in Public Service Delivery in Nigeria. *International Journal of Current Science Research and Review.* 08(10) 5038-5047. DOI: 10.47191/ijcsrr/V8-i10-17.

Nwokoroeze, C. N., Onwuekwem, T. R., & Chukwu, U. H. (2025). Evaluating the Impact of E-Government and Digital Transformation on Public Service Delivery in Nigeria. *Global Journal of Political Science and Administration, 13*(2), 31–41. DOI:10.59613/global.v3i1.374

Organisation for Economic Co-operation and Development (2020). *Digital Government Index 2019 Results*. Paris: OECD Publishing. https://www.oecd.org/en/publications/digital-government-index

Organisation for Economic Co-operation and Development (OECD) (2024). *Digital Government*. Paris: OECD. https://www.oecd.org/en/topics/digital-government.html

Pamungkas, I. N. A., Pramiyanti, A., & Sugandi, M. S. (2025). Applying a diffusion innovation theory to identify novelty in communication research. *Cogent Social Sciences*, *11*(1). https://doi.org/10.1080/23311886.2025.2564782.

Paul, C., & Malachy, J. (2025). E-Governance Initiatives and Financial Management in the Nigerian Public Sector: An Integrated Conceptual Framework for Enhancing Transparency and Efficiency. *Dutch Journal of Finance and Management, 8*(1), 3-10. https://doi.org/10.55267/djfm/16409.

Rogers M.E. (2003). Diffusion of Innovations (5th ed.). Free Press.

Scott. (2014). Review of Institutions and Organizations. Ideas, Interests and Identities." in: Management 2 (17). 136-140.

Shenkoya, T. (2023). Can Digital Transformation Improve Transparency and Accountability of Public Governance in Nigeria? Transforming Government: *People, Process and Policy, 17*(1), 54–71. https://doi.org/10.1108/TG-08-2022-0115

Teece D.J. (2020). *Dynamic Capabilities and Strategic Management: Organizing for Innovation and Growth*. Oxford University Press.

Teece, J.D., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

Trabelsi, N., Boujelbene, Y. (2024). Public Sector Efficiency and Economic Growth in Developing Countries. *J Knowl Econ* 15, 596–615. https://doi.org/10.1007/s13132-022-01038-2

United Nations Development Programme. (1997). *Governance for Sustainable Human Development*. New York: UNDP.

Valente W.T. (1995). Network Models of the Diffusion of Innovations. Hampton Press.

Wang, Z., Liu, H., Li, T., Zhou, L. & Zhou, M. (2023). The Impact of Internet Use on Citizens' Trust in Government: The Mediating Role of Sense of Security. *Systems. 11*(1). 47. 10.3390/systems11010047.

Wirajing, M.A.K., Nchofoung, T.N. (2023). The role of education in modulating the effect of ICT on governance in Africa. *Educ Inf Technol 28,* 11987–12020. https://doi.org/10.1007/s10639-023-11631-w.

Woleola J. Ekundayo (2017). Good Governance Theory and the Quest for Good Governance in Nigeria. *International Journal of Humanities and Social Science*. 7(5) 157-161. https://ijhss.thebrpi.org/journals/Vol_7_No_5.

World Bank. (1992). *Governance and Development*. Washington, DC: World Bank.

Yuan, R., Masron, T.A., Chen, Y. et al. (2025). Government effectiveness on environmental degradation in developing countries. *Int. J. Environ. Sci. Technol. 22,* 14279–14292. https://doi.org/10.1007/s13762-025-06560-9.

Zhang, M. & Kaur, M. (2024). Toward a theory of e-government: Challenges and opportunities, a literature review. Journal of Infrastructure, Policy and Development. 8(10): 7707. https://doi.org/10.24294/jipd.v8i10.7707.

Cite this Article: Obomeghie, MA (2026). The Governance Dividends of Digital Transformation in Nigeria: A Fully Modified Ordinary Least Square (FM-OLS) analysis. *Greener Journal of Economics and Accountancy*, 13(1): 14-28, **https://doi.org/10.15580/gjea.2026.1.061926091**.