

# PROSPECTS AND CHALLENGES OF E-GOVERNANCE INITIATIVES IN NIGERIA'S PUBLIC ADMINISTRATION.

Okoh, itebite Daniel <sup>1\*</sup> Okonoboh Oriabure Wednesday<sup>1</sup> & Edegware Gideon Jesuhovie <sup>1</sup>

<sup>1</sup> Department of Public Administration, University of Benin, Nigeria;  
[itebite.okoh@uniben.edu](mailto:itebite.okoh@uniben.edu).

<sup>1</sup> Department of Public Administration, University of Benin, Nigeria;  
[oriabure.okonoboh@uniben.edu](mailto:oriabure.okonoboh@uniben.edu).

<sup>1</sup> Department of Public Administration, University of Benin, Nigeria;  
[jeshuhovie@gmail.com](mailto:jeshuhovie@gmail.com).

\* Correspondence: [itebite.okoh@uniben.edu](mailto:itebite.okoh@uniben.edu)

## Abstract

The relative scarcity of scholarly attention directed towards other digital initiatives has underscored the importance of examining the objectives, prospects and challenges associated with e-passport, National Identification Number (NIN), and electronic civil registration and vital statistics (e-CRVS) digital solutions within Nigeria's public administration landscape. In the course of the analysis, the study utilised the frameworks of New Public Management (NPM) and Technology-Organisation-Environment (TOE). A case study method was used to explore the opportunities and difficulties associated with the mentioned digital smart solutions, relying primarily on secondary data from government publications and peer-reviewed articles before the data underwent thematic analysis. The study revealed that the considered digital technologies had the potential of improving security, providing unique identity for all citizens, generating revenue for government, assisting government in national planning and reducing corruption by overcoming the issues of weak digital infrastructure, inadequate human capacity, extortion and poor data collection tools by vital statisticians. Consequently, the paper recommended Public-Private-Partnership (PPP) in providing robust digital infrastructure for internet penetration, inclusivity and cyber security; awareness campaign on the relevance of capturing vital statistics by government organisations such as the Ministry of Information and Orientation and National Orientation Agency (NOA); improved data collection techniques and methods of vital statisticians and report of corrupt officials/agents to the appropriate authority to adequate sanction. This research holds considerable importance for policymakers, offering insights into the necessity of a robust regulatory framework for e-governance programs in Nigeria, among other things.

**Keywords:** E-governance, E-passport, eCRVS, digital tools, NIN

## Introduction

In an ever-changing world driven by technology and innovation, governments around the world have come to embrace digital technologies in the administration of public goods and services (Khomyn, 2023). For example, Singapore Smart National Programme, Denmark's Digital Government Ecology and Zhejiang's China's "One Run at Most" Reform (Deng, Wu, Ni & Chen, 2025). E-governance is a departure from the traditional model of administration that possess most of the characteristics of ideal Weberian bureaucracy that is paper-based, centralised and formalistic to a new model of administration that is digitalised, decentralised, flexible and innovative facilitated by the adoption of digital tools for better communication, citizen engagement, transparency, accountability, efficiency and credibility (Oluwalogbon & Adedeji (2018). In other words,

this new model of administration seeks to eliminate bureaucratic bottlenecks (delays), excessive paperwork, inefficiencies and reduce opportunism for corruption. E-governance can be linked to the perspectives of the NPM and Governance theories who advanced an administrative model that is more responsive, flexible, innovative and more customer attuned (Deng, Wu, Ni & Chen (2025)). Generally, e-governance initiatives have been adopted by governments to enhance digital literacy, reduce red tape, promote transparency, efficiency, participative governance and provide information about government actions, fiscal policies and overall performance (The United Nations e-Governance Survey, 2020, as cited in Olabimitan, Ogunmodede & John 2025). In developing countries like Nigeria, the adoption of e-governance initiatives is a prerequisite for the administration of aid and other financial assistance by Bretton Woods institutions such as the World Bank and International Monetary Funds (IMF) to ensure the effective utilisation of the administered resources (Central Bank of Nigeria, 2021).

It must be stressed that e-governance initiatives in Nigeria results have been mixed. On the positive note, it has fostered participatory governance, automatic governance process, provided access to information and improved communication amongst citizens, businesses, government employees and governments and makes government more accountable (Olufemi, Bashir, Uthman, Amodu & Ifatimehin, 2024). On the negative note, there is the slow and selective implementation of digital technologies in Nigeria's Public Administration like IPPIS, for instance, has not been fully implemented at the State and Local Government levels (Alalade, Oladeji, Oyebamiji, 2025). This is due to resistance to change and conflict among the stakeholders like the Academic Staff Union of Universities (ASUU) opposition to the adoption of IPPIS in universities payroll and personnel administration (Omole, Pillah & Ayeh, 2025). More so, issues of digital infrastructure (internet penetration and cyber security threat), inadequate funding, weak human capacity development; lack of government readiness in the adoption and implementation of e-governance initiatives have had impact on the implementation of e-governance initiatives in Nigeria (Nwambuko, Eyikorogha & Chigozie, 2025; Nwokoroeze, Onwuekwem & Chukwu, 2025)

Having reviewed recent and related literature on the subject matter, a plethora of the studies in Nigeria tend to focus more on digital tools such as Integrated Personnel and Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), Treasury Single Account (TSA). Examples of such studies include: Paul & Malachy (2025), Sukare & Abdullahi (2025) and Nwambuko, et al. (2025) explicating the successes and shortcomings of the digital tools. Thus, less attention has been given to other e-governance initiatives. It is quite understandable that studies are centered on IPPIS, for instance, because it is a cornerstone digital tool in Nigerian governance space. It is against the background that this study seeks to examine other digital tools such as electronic passport (e-passport), the National Identification Number (NIN) and the Electronic Civic Registration and Vital Statistics (E-CRVS). Therefore, the main objective of this study was to highlight the objectives of the mentioned digital technologies. Other specific objectives were to examine the prospects of deploying these e-governance initiatives and identify challenges to the successful implementation of them with the aim of suggesting practical solutions to ensure these challenges are overcome so as the digital tools can achieve their objectives.

This research holds considerable importance for policymakers, offering insights into the necessity of a robust regulatory framework for e-governance programs in Nigeria. Also, the study emphasises the imperative for joint action among governmental bodies, private entities, and civil society organisations to surmount the deficiencies in digital infrastructure that impede the complete assimilation of e-governance solutions within Nigeria's public administration. Furthermore, the paper's conclusions underscore the critical role of enhancing the skill sets of public sector employees to facilitate the efficient implementation of digital tools in their professional capacities. The research questions listed below are intended to direct this study:

- i) What are the objectives of e-passport, NIN and e-CRVS?
- ii) What are the prospects of deploying e-passport, NIN and e-CRVS in Nigeria's public administration?
- iii) What are the challenges or impediments to the adoption and implementation of e-passport, NIN and e-CRVS in Nigeria's administrative system?

## LITERATURE REVIEW

The Nigerian Communication Commission (NCC) was established in 1992, which is where the e-governance projects in Nigeria got their start (Agunloye, 2007; Adeyeye & Iweha, 2005, as cited in Ishola et al, 2025). The establishment of the National Information Technology Development Agency (NITDA) in 2001, which further built an ICT platform with considerable G2G awareness that established e-governance initiatives in Nigeria, came after this development. Under this approach, the government established a private-public partnership (PPP) of a tripartite joint venture registered as National E-Government Strategies Limited (NeGST), which is made up of the government (5%), a bank consortium (15%), and strategic partners (80%). This project's goal was to develop an architecture that would direct the development of digital solutions in government organisations and the first project of this venture was the e-registration of teachers in Nigeria in May, 2006. (Okot-Uma & Rogers, 2004, as cited in Benson & Anjawa, 2025). Additionally, the creation of the National Service Portal in 2013, a web-based platform for interconnectedness among MDAs (Asogwa, 2013, as cited in Ishola, et al, 2025). Since then governments at all tiers in Nigeria had evolved various digital technologies in their respective public administration domains. Examples of such technologies are IPPIS, GIFMIS, TSA and EdoBest.

E-governance like other concepts in the social sciences suffers from definitional pluralism. “*E-governance is the use of Information and Communication Technology (ICT) and computer networks to make government more efficient and effective, with the goal of encouraging citizens' participation and strengthening the relationship between government and the people*”(Olabimitan, et.al, 2025;112-113). The definition excludes transparency and accountability benefits of e-governance initiatives. “*E-governance involves the application of ICT in areas such as public service delivery, decision making, administration and financial management, with the goals of enhancing efficiency, accountability and transparency*” (Lim & Yigitcavilar, 2022, as cited in Paul & Malachy, 2025:4). This definition reveals that e-governance is an encompassing tool that covers

vast areas of public administration. The definition did not capture citizens' engagement and credibility of government which effective implementation of e-governance initiatives could offer (Deng, Wu, Ni & Chen, 2025).

According to Grigalashvili, (2023: 18), "*e-governance involves the automation or computerisation of existing paper-based procedures that will prompt new styles of leadership, new ways of debating and deciding strategies and new ways of transacting*". The definition stresses on features of the modern administration though it fails to highlight the essence of e-governance which includes efficiency, effectiveness, transparency, accountability, citizens-centric and credibility. "*E-governance refers to the application of information technologies in enhancing public access to and delivery of public information and services to citizens, businesses and government institutions*" (Dhamodharam & Saminathan, 2011, as cited in Ishola, et.al.,2025, 2). The scholars highlighted the domains of e-governance though they did not place more emphasis on the benefits of e-governance such as accountability, efficiency and effectiveness.

"*E-governance refers to the use of information and communication technologies (ICTs) by government agencies to enhance public service delivery, improve administrative efficiency and citizen participation in governance*" (World Bank, 2022, as cited in Eze, 2025:35). The definition glossed over other benefits of e-initiatives such as transparency, accountability and credibility. "*E-Governance refers to the use of ICT in government operations to improve service delivery, transparency and citizen participation*" (Olufemi, et al., 2024: 191). The authors' definition of e-governance did not capture accountability, credibility. A more encompassing definition of E-governance was provided by Nwokoroeze, et al., 2025: 331), according to them, it is "*simply the use of ICTs in carrying out government processes, highlighting the shift from the traditional to a method of digitalisation of government activities, in order to improve efficiency, transparency and accountability of government processes leading to better service delivery and citizen engagement*".

From the definitions given above, e-governance can be defined as the use of digital technology in public administration at all levels of government in order to increase credibility, efficiency, effectiveness, accountability, transparency, and citizen participation. Three (3) domains of e-governance have emerged from the studies of Ihemadu (2025) and Nwokoroeze, et al., (2025). These are E-Administration, which focuses on improving government internal administration; E-Services, which focuses on providing services to individuals and businesses; and E-Society, which deals with interactions with and within civil society.

On the other hand, public administration is a combination of two words, public and administration. Public connotes everything that is held in common or generality of citizens while administration entails the management, organising, direction and coordination of the efforts of others to achieve organisational goals or purposes (Okoh, 2025). In other words, public administration has to do with government institutions saddled with the responsibility of providing public goods and services while private administration has to do with profit motive organisations not held in common (Okoh, 2025). According to Adamolekun (1983), as cited in Inakefe, Bassey, and Innah (2021), public administration in Nigeria is an encompassing concept which covers the Federal

Civil Service, the 36-State Civil Service, Federal and State government statutory corporations, 774 Local Governments, Federal or State government-created authorities or commissions, education institutions that are primarily funded or established by the Federal or State governments, the Nigerian Police Force, the Armed Forces and the judiciary.

However, studies have shown that e-governance initiatives in Nigeria and elsewhere have tremendous potential to transform government operations and processes by enhancing digital literacy, reducing bureaucracy or red tape, promoting transparency, efficiency and citizen engagement, provision of information to citizens' about government actions, budgets, expenses and overall performance (United Nations E-Government Survey, 2020, as cited in Olabimita et al., 2025). Similarly, Sukare & Abdullahi (2025) highlighted transparency, accountability, citizens' engagement, cost reduction and economic growth benefits. E-governance has fostered inclusivity, efficiency, responsiveness, creating a more accountable and citizen-centric public administration (Eze, 2025). It has the potential to address serious issues of inefficiency, corruption and gap between government services and citizens expectation (Ndou, 2004, as cited in Olufemi, et al., 2024). Digital governance has ushered in novel leadership styles (participative governance), innovative approaches to policy formulation and investment decisions, expanded access to education resources, new channels for citizens feedback and modernised methods for organising and delivering information and services (Ihemadu, 2025).

Conversely, research has revealed that there are challenges faced by the Nigerian government and its institutions in achieving a successful implementation of e-governance initiatives. These challenges include infrastructural and technical constraints or inadequate digital infrastructure, human capacity, digital literacy and inclusion issues, institutional, governance and political economy issues, cross-cutting technical institutional issues (Nwambuko et al, 2025); ethical issues (Olufemi et al, 2024); budget limitation and funding issues (Olaopa, 2019, as cited in Omowunmi & Salako, 2020); lack of coordinate approach to transform government agencies results in fragmented initiatives that fail to achieve large-scale impact (Gil-Garcia et al, 2018, as cited in Omowunmi & Salako); poor maintenance and cost of procuring digital tools (Cinjel & Chujor, 2024); e-waste concern as a result of used ICT gadgets that is near-end-of life technologies (Omobowale, 2013, as cited in Ishola et al. 2025) and lack of government readiness in the adoption and implementation of e-governance initiatives (Nwokoroze et al. 2025).

## THEORETICAL FRAMEWORKS

The New Public Management theory (NPM) and the Technology-Organisation-Environment (TOE) framework were the two theories used to examine e-governance projects in Nigeria's public administration.

**New Public Management Theory (NPM):** Key proponents of this theory are Margaret Thatcher, Ronald Reagan, David Osborne, Ted Gaebler, and Christopher Pollitt among others. The NPM theorists are against the traditional model of administration (Weberian bureaucracy) that is formalistic, rigid and hierarchical which stifles innovation, creativity

and with its associated inefficiencies and advocated for a new form of administration that is flat, flexible, innovative, citizen-centric and decentralised. Thus, the incorporation of private sector practices and market mechanisms for improving effectiveness and efficiencies of public goods and services (Sapru, 2013). In other words, the NPM is centered on greater efficiency, effectiveness, eliminating red tape, reducing the cost of governance and embracing participative governance. From an NPM perspective, public institutions must offer goods and services that are tailored to the preferences of their clients (Osborne, 2020). According to Shahiduzzaman, Abedin, Islam, and Hasan (2025), they believe that decentralisation of authority, as opposed to centralisation of authority, makes the government more adaptable and responsive to the needs or problems of its population. Additionally, NPM theorists concur that contracting out some government functions to the private sector will spur innovation and lower costs (Sapru, 2013).

The principles of efficiency, transparency and citizens' engagement are reflected in the under study digital tools in the following ways: e-passport ensures for the ease of tracking online applications and fast tracking the processing time of passports. With the adherence to the International Civil Aviation Organisation (ICAO) standard, e-passport brings about a transparent framework for passport verification. More so, the online renewal system ensures citizens renew their passports regardless of their location and thereby eliminates meddlesomeness of intermediaries. NIN ensures the assigning of a unique identification numbers that is integrated into other government systems including financial services like the BVN, which facilitates better tracking of financial activities to reduce for instance tax invasion. Additionally, NIN helps in identifying recipients of social welfare packages, thus, ensuring transparent, eliminating fraud and waste of public funds. Further, the initiative has improved citizens' engagement by ensuring that through the self-service modification portal, citizens can update their details as well as manage their identity data without visiting a physical office (National Identity Management Commission, un.). Furthermore, through the introduction of automated data entry and validation, e-CRVS has greatly reduced human error in data entry, thus, ensuring accurate and reliable statistics for national planning and socio-economic development. As evidence abounds that one hindrance to implementation of Nigerian government policies, is the inadequate or paucity of data for national planning (Wilson & Epelle, 2018). E-CRVS also improves citizens' engagement by ensuring digitilising vitals through VITALREG platform and other self-service modules that e-CRVS system offers (National Population Commission, 2024).

**Technology-Organisation-Environment (TOE) Framework:** The TOE framework was propounded by Tornatzky & Fleischer in 1990 (Ahmad, Omar, Ali & Ali, 2023). TOE emphasises on how technology, organisation and environment influence the adoption and implementation of digital technologies in government operations/managerial activities. The technological background shows both new and current technologies that are pertinent to each company (Nguyen, Le, & Vu 2022). The organisation context examines the organisation's resources and features, including business networks, managerial structure, human resources, and organisational traits (Satyro et al., 2024). The external environment in which the company operates, including government agencies, commercial competitors, and industrial obligations, is referred to as the environmental context (Mahakittikun et al., 2020, as cited in Ahmad et al., 2023). The theory posits the interplay of these three

aspects would determine if an organisation would adopt a new technology or not. Simply put, the context of each aspect could either encourage (facilitate) or hinder (inhibits) the adoption of a new technology.

In the Nigerian context, the technological adoption is contingent upon financial resources, the suitability and efficacy of the technology, and its practical application. Obstacles to the widespread implementation and assimilation of e-governance programs frequently include insufficient financial backing, resistance to innovation, and the necessity for staff to acquire advanced technological proficiencies and expertise in utilising digital instruments (Dada, Akinwunmi & Ojo, 2025; Nwambuko, Eyikorogha & Chigozie, 2025). Addressing these challenges is crucial for the successful integration of intelligent solutions within Nigerian public administrative frameworks. In addition, the prevailing organisational structure and organisational culture are pivotal factors that will shape the adoption and integration of these digital instruments within governmental administrative frameworks. For example, in a conventional administrative environment characterised by rigidity, excessive formality, and inflexibility, the digitalisation of processes and operations may encounter obstacles stemming from resistance to change and the entrenched immutability of existing administrative structures. Moreover, the organisational culture predominantly observed in the Nigerian public sector is often characterized by protracted decision-making processes and a paucity of innovation (Oluwatoyin, 2025). Overcoming these impediments necessitates a precise definition of the expected employee behaviors and requires leaders or superiors to establish exemplary organisational standards to achieve overarching organisational objectives. Lastly, the external influence from the Bretton Wood institutions (World Bank and IMF) has made the adoption of digital initiatives a prerequisite or condition for the administration of aid and other financial assistance (Central Bank of Nigeria, 2021) and pressure from the public has also made the Nigerian Government to adopt e-governance initiatives such as IPPIS, GIFMIS, TSA, NIN, e-passport among other tools.

## METHODOLOGY

The case study method was adopted because the aforementioned digital initiatives have not been studied extensively. Thus, this approach ensured an in-depth understanding of the prospects and challenges of e-passport, NIN and e-CRVS in the Nigerian Public Administration. Consequently, improving the body of knowledge or literature on e-governance initiatives in Nigeria. Data were obtained from secondary sources mainly from peer reviewed papers, government documents/reports found on e-passport, NIN and e-CRVS websites and other online sources related to the studied digital smart solutions. In other words, these data sources provided information on the e-governance initiatives in focus such as the objectives and rationale for the introduction and adoption of the initiatives in the Nigerian Government operations and processes. A thematic analytical approach was employed to interpret the collected data, allowing for an understanding of the themes that assist in addressing the research questions.

## RESULTS AND DISCUSSION

### Case 1: E-Passport Initiative

E-passport is a biometric travel document with an embedded microchip holding the holder's data, enhancing security with features of polycarbonate technology, a 5 to 10-year validity and an online application process for Nigerian citizens (<https://immigration.gov.ng/passports/>) However, e-passport was first launched in May 17, 2007 by the Nigeria Immigration Service (NIS) under the comptroller-General C.J. Udeh and this made Nigeria the first country in African to embrace e-passport which is aimed at combating identify theft, aligning with the International Civil Aviation Organisation (ICAO) standards (cdfib.gov.ng). E-passport was a reform of NIS engineered by the Ministry of Interior that seeks to digitalise new passport application and renewal with the aim of eliminating tout and racketeers in the passport administration (Eze, 2025). In other words, it was a reform to sanitise passport administration in Nigeria.

The implementation of e-passports has significantly bolstered security by mitigating identity theft, a feat achieved through the incorporation of polycarbonate data features and adherence to International Civil Aviation Organisation (ICAO) standards, thereby ensuring global recognition of the passport as a legitimate document. This technologically advanced system facilitates simplified tracking of applications and accelerates passport processing, which was previously a laborious and protracted procedure. Furthermore, e-passports have fostered improved citizen engagement by introducing online renewal services, enabling individuals to apply for and renew their passports remotely. In addition, the Nigerian Immigration Service (NIS) provides virtual support and WhatsApp assistance channels to address queries and issues pertaining to passport applications and other related matters (Nigeria Immigration Service Headquarters, 2025).

Some challenges of e-passport initiative include: the waiting period between application and biometric data capture to the limit for the number of applicants that the existing passport offices can attend to in a day (Aregbesola, as cited in Odeyemi, 2023); the lack of access to scanners and devices to upload birth certificates, state of origin certificates, NIN and ICAO recommended standard passport photos (Okocha, 2024); power issues, interrupted internet access, difficulty in uploading documents, digital literacy for applicants to understand the new online processes especially with regard to the photo submission guidelines of ICAO.

The above identified issues can be subsumed under inadequate digital infrastructure, inadequate human capacity building and poor sanitisation efforts of NIS and other related bodies such as the Ministry of Information and Orientation and National Orientation Agency (NOA). These challenges can be addressed by NIS and other agencies enlightening the public on the proper application procedure, thus improving digital competencies of applicants. The need to enhance digital infrastructure capacity in terms of provision of constant power supply and internet penetration to remote areas to aid seamless application process and lastly, the consistent training and development of immigration personnel so as to render valuable advice and support to applicants.

### **Case 2: The National Identification Number (NIN)**

The National Identification Number (NIN) is a service offered by the National Identity Management Commission (NIMC). The NIN is a one-of-a-kind identification number

(comprising eleven digits) allocated to individuals after they successfully enroll through the online platform and by visiting NIMC offices in person for data capturing ([nimc.gov.ng](http://nimc.gov.ng)). The initial effort to launch a national identity initiative via the Department of National Civic Registration (DNCR) took place in 1977. Regrettably, the project did not succeed because of inadequate planning, corruption, and technological limitations (Creative Minds Global Technologies, 2025). Jumping ahead to 2010, the National Identification Number (NIN) was formally established as part of this revamped system, and the countrywide registration commenced in 2013 (Creative Minds Global Technologies, 2025).

The National Identification Number (NIN) serves as a singular identifier, enabling the integration of diverse databases housed within government ministries, departments, and agencies (MDAs), as well as private sector entities like the Bank Verification Number (BVN) system. This integration facilitates the consolidation of previously fragmented data silos. Prior to the NIN's implementation, government databases were characterised by a lack of centralisation and a comprehensive system, leading to fragmentation. The NIN has fostered inter-agency collaboration, exemplified by its linkage to the National Social Register for the transparent distribution of palliative care and other social welfare programs. Furthermore, its connection to bank accounts helps to mitigate identity fraud. This initiative has demonstrably enhanced service delivery, making the NIN a mandatory form of identification for accessing services such as the National Health Insurance Scheme (NHIS), tax payments, and pension schemes. Consequently, the government can now accurately identify intended recipients of welfare programs, thereby streamlining the distribution of essential goods and monetary assistance, including food stamps and conditional cash transfers.

NIN initiative no doubt has its challenges, such as the issue of extortion by private agents during data capturing, delay in application processing due to network glitches, data inconsistencies (mismatches) and user errors and the associated fees for modification and re-issuance (Ayang, 2024; Creative Minds Global Technologies, 2025). The issues can be narrowed down to corruption, heavy financial burden on application and weak digital infrastructure. These challenges can be tackled by applicants ensuring that BVN/NIN matches to complete the registration process. The use of artificial intelligence like virtual assistant to guide applicants and provide valuable information regarding the registration and collecting process. Also, the use of artificial intelligence to detect fraudulent online registration. Report any compromised official/agent to the appropriate authority for adequate sanction and finally, the need for the government and private sector to provide enhanced digital infrastructure to ensure reliable connectivity and internet penetration.

### **Case 3: The Electronic Civic Registration and Vital Statistics (eCRVS)**

This is a departure from the analog (manual and paper-based) processes to a streamlined digital framework for capturing live events such as birth rate, death rate, marriages and divorces. The initiative was birthed by President Bola Ahmed Tinubu on Wednesday, 8<sup>th</sup> November, 2023 ([nationalpopulation.gov.ng](http://nationalpopulation.gov.ng)). ECRVS provides a legal identity for all like the NIN, which is in line with the attainment of SDG 16.9.2, which stresses on legal identity for all including birth registration. The implementation of this program has resulted in the precise, uniform, and digitally recorded vital statistics and health data,

thereby establishing a comprehensive data repository and enabling the valid identification of all individuals, as digital identities are assigned to newborns. This aligns with the Sustainable Development Goals' objective of universal valid identification, irrespective of an individual's origin or social standing. Prior to this undertaking, vital statistics were not systematically recorded. For example, birth and death rates were insufficiently documented within government databases, exacerbated by cultural impediments and economic hardship. The e-CRVS system, with its automated data input and verification capabilities, mitigates human errors during data entry, consequently yielding accurate and dependable statistics for governmental socio-economic planning and development initiatives. Moreover, the availability of robust and reliable vital statistics empowers governments to effectively plan, allocate resources to specific sectors or societal segments, and address critical issues such as elevated mortality rates, under-five mortality, and communicable diseases like COVID-19.

No doubt, eCRVS is faced with some challenges such as lack of awareness of vital registration, cultural and contextual constraints due to proper civic registration (Atama, et al., 2021); lack of infrastructure to capture all birth and death rates (WHO, 2024); lack of synchronisation of eCRVS with NIN and other identity digital systems; issue with data silos due to lack of centralised database; difficulty accounting for the cause of death that is the issue of collecting accurate medical cause-of-death information (WHO, 2024). The identified shortcomings of the initiative can be grouped under poor digital infrastructure, inadequate human capacity, cultural barriers and weak data collection techniques of vital statisticians. These challenges can be tackled by the need for advocacy and awareness campaigns on the relevance of capturing vital statistics by government organisations and NGOs; utilising a robust digital infrastructure to capture all birth and death rates; training of staff on the use of eCRVS tools for capturing births, deaths and other vital information; providing improved data collection methods of vitals; system synchronisation of eCRVS with other forms of identity such as BVN and NIN and the use of a centralised repository such as a warehouse or integration tools such as Extract, Transform, Load (ETL) and Application Programming Interface (APIs) to connect system within and across MDAs.

From the foregoing, the analysis shows that the considered digital tools have the potential to transform the delivery of services, administrative efficiency and participatory governance in Nigerian public administration. For example, if e-passport infrastructure capacity is improved and human resources are adequate, including the use of forensic experts, there lies a potential to curb identity fraud, clean up passport administrative systems, increase the generation of government resources, improve security, and increase the processing time of documents. Additionally, the use of online registration and NIN updates would significantly reduce extortion (inappropriate practices by officials/agents), by the use of improved digital infrastructure, deploying artificial intelligence (AI) to detect false online registrations, and the use of virtual assistants to support and provide information to applicants. This in turn ensures the achievement of the objective of a unique identification of each citizen, thereby, strengthening security and supporting development planning. Lastly, eCRVS like NIN, can provide legal identity for all Nigerian citizens, help government plan national priorities, allocate resources and values,

if challenges faced by eCRVS, such as the lack of a central data management system, a weak digital infrastructure, a lack of human resources, and a lack of data collection methods are addressed by government and other stakeholders.

## CONCLUSION

E-governance initiatives of e-passport, NIN and eCRVS have the potential of improving our security, providing a unique identity for citizens, generating revenue for the government, helping the government in development planning and reducing corruption among others. No doubt, these digital tools are faced with main issues of weak infrastructure, inadequate human capacity, corruption and poor data collection methods. Therefore, the paper recommends that for the actualisation of the objectives of the above discussed digital technologies, government must partner with the private sector, a public-private partnership (PPP) to provide robust digital infrastructure for internet penetration, inclusivity and cyber security; awareness campaign on the relevance of capturing vital statistics by government organisations such as the Ministry of Information and Orientation and National Orientation Agency (NOA); improved data collection techniques and methods of vital statisticians and report of corrupt officials/agents to the appropriate authority for adequate sanction. The study suggested that other e-governance initiatives in Nigeria should be explored by researchers such as Government Contact Centre (GCC), National E-Government Interoperability Framework (Ne-GIF) and Electronic Document Management System (EDMS). Also, future studies can adopt quantitative tools to interrogate the digital tools considered in this paper and lastly, a comparative analysis can be carried with similar e-governance initiatives of other public administrative systems.

## References

- Ahmad, I.O., Siti, S. O., Ali. M., & Ali,S. (2023). A conceptual study of toe and organisational performance. *European Conference on Innovation and Entrepreneurship*, 18(2), 963-968. DOI:10.34190/ecie.18.2.1868
- Alalade,E.O., Oladeji, O.O., & Oyebamiji,O.A. (2025).Digital transformation and technological innovation in governance ippis in Nigeria. *The International Journal of Research and Innovation in Social Science (IJRISS)*, 9(9), 3078-3086. DOI: <https://dx.doi.org/10.47772/IJRISS.2025.909000261>
- Atama, C., Igwe, I., Odii, A., Igbo, E., Ezumah, N., Okeke, V., Okonkwo, U., & Ugwu, C. (2021). Challenges to vital registration in Nigeria. *International Journal of Sociology and Anthropology*, 13(1), 1-8.
- Ayang, M. (2024, October 3). Infrastructure challenges impacting nin card production says urbanID exec. BiometricUpdate. Retrieved from <https://www.biometricupdate.com/202410/infrastructure-challenges-impacting-nin-card-production-says-urbanid-exec>

- Benson, L., & Anjawa, A. S. (2025). E-government reforms and its implications on public administration in Nigeria: A case study of the Fourth Republic. *Kashere Journal of Politics and International Relations*, 3(1), 452–459.
- Central Bank of Nigeria (2021). Understanding Monetary Policy Series 10. Nigeria's engagement with Bretton Woods institution. Retrieved from <https://www.cbn.gov.ng/out/2022/mpd/series%2010.pdf#:~:text=The%20roles%20of%20these%20institutions%20have%20evolved%2C,providing%20long%2Dterm%20development%20assistance%20and%20poverty%20eradication>
- Chizoba, O.J., & Onuora, J.K.L. (2025). Effect of digital transformation on public sector accountability and transparency in Nigeria. *Journal of Accounting and Financial Management*, 11(1), 40-51
- Cinjel, N.D., & Chujor, O.F. (2024). Digital governance and its impact on productivity in the Nigerian public sector. *Nigerian Journal of Management Sciences*, 25(1b), 315-329
- Civil Defence, Correctional, Fire and Immigration Services Board (un.). Retrieved from <https://cdcfib.gov.ng/>
- Creative Minds Global Technologies (2025, October 11). Getting nin abroad feels like a struggle for Nigerians in the diaspora. <https://creativemindsng.com/posts/getting-nin-abroad-feels-like-a-struggle-for-nigerians-in-diaspora/>
- Creative Minds Global Technologies (2025, October 11). The story behind Nigeria's national identification number (nin). Retrieved from <https://creativemindsng.com/posts/the-story-behind-nigerias-national-identification-number-nin/>
- Dada D.A., Akinwunmi A.A., & Ojo, C.A. (2025). Application of artificial intelligence on customer satisfaction and loyalty among Deposit Money Banks in Ondo State, *International Journal of Management Technology*, 12 (5), 65-79. <https://doi.org/10.37745/ijmt.2013/vol12n56579>
- Deng, L., Wu, F., Ni, K., Chen, X. (2025). Digital governance: Effective paths and strategies to enhance government credibility. *Journal of Economics, Business and Management*, 13(2), 212-218
- Eze, C. (2025). Immigration officials: High cost of passport cannot prevent racketeering, extortion. This Day. Retrieved from <https://www.thisdaylive.com/2025/09/05/immigration-officials-high-cost-of-passport-cannot-prevent-racketeering-extortion/#:~:text=He%20said%2C%20%E2%80%9COur%20target%20is%20very>

%20clear:,as%20much%20as%20N200%2C000%20to%20fast%2Dtrack%20proce  
ssing.

Eze, T.C. (2025). A case study of digital governance in Nigeria's public administration. *IRASS Journals of Arts, Humanities and Social Sciences*, 2(9), 35-43

Grigalashvili, V. (2023). Digital government and digital governance: Grand concept. *International Journal of Scientific and Management Research*, 6(2),1-25. DOI - <http://doi.org/10.37502/IJSMR.2023.6201>

Ihemadu,M.C.N. (2025).E-governance on administration and service delivery in Nigeria's local government administration. *International Journal of Public Administration (IJOPAD)*, 4(2), 76-91

Inakefe, G., Basse, V., & Innah, D. (2021). Administrative problem handling in Nigeria's public sector: Theory and practice. *African Journal of Politics and Administrative Studies*, 14(2), 261-285.

Ishola, A.A., Maramura, T.C., & Gumbo,T. (2025).Charting digital governance: A bibliometric analysis of information and communication technology research in Nigeria's public administration using Scopus. *Front. Sustain. Cities*, 7, 1-21. <https://doi.org/10.3389/frsc.2025.1605736>

Khomyn, A. (2023, September 26). Digital transformation in Government: Challenges, examples. Soloway. Retrieved from <https://soloway.tech/blog/digital-transformation-in-government/>

National Population Commission (un.). Retrieved from <https://nationalpopulation.gov.ng/>

Nguyen, T.H., Le, X.C., & Vu, T.H.L. (2022).An extended technology-organization-environment (TOE) framework for online retailing utilization in digital transformation: Empirical evidence from Vietnam. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 200. <https://doi.org/10.3390/joitmc8040200>

National Identity Management Commission, (un.). NIMC self-service NIN modifications. Retrieved from <https://selfservicemodification.nimc.gov.ng/>

National Population Commission (2024, Febuary, 16).NPC, Barnksforte, UNICEF partner to improve VITALREG system in Nigeria. Retrieved from <https://nationalpopulation.gov.ng/news/npc-barnksforte-unicef-partner-to-improve-vitalreg-system-in-nigeria>

Nigeria Immigration Service (un.). Retrieved from <https://immigration.gov.ng/passports/>

- Nigeria Immigration Service Headquarters (2025, September 29). NIS addresses technical challenges on contactless passport application system. Retrieved from <https://immigration.gov.ng/nis-addresses-technical-challenges-on-contactless-passport-application-system/#:~:text=Here%20are%20some%20things%20you%20can%20try:,issued%20over%2015,000%20passports%20to%20Nigerians%20abroad.>
- Nwambuko, T.C., 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*, 8(10), 5038-5047
- 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
- Odeyemi, J. (2023, May 3). FG: Challenges in obtaining Nigerian passport are over. Daily Trust. Retrieved from <https://dailytrust.com/fg-challenges-in-obtaining-nigerian-passport-are-over/?noamp=available>
- Okocha, C. (2024, January 21). Nigerians groan under new passport automation processes. Arise News. Retrieved from <https://www.arise.tv/nigerians-groan-under-new-passport-automation-processes/#:~:text=It%20was%20gathered%20that%20in,renew%20their%20expired%20international%20passports.%E2%80%9D>
- Okoh, I. (2025). Examining the veracity or otherwise of Woodrow Wilson's theory of politics-administrative dichotomy in contemporary Nigeria's public sector management. *Journal of Governance and Administrative Reform*, 6(2), 222–244. <https://doi.org/10.20473/jgar.v6i2.77715>
- Olufemi, I.M., Bashir, M., Uthman, H., Amodu, Y., & Ifatimehin, P.C. (2024). Artificial intelligence and e-governance in public administration in Nigeria. *ASRIC Journal on Social Sciences and Humanities*, 5(1), 190-203
- Oluwalogbon, L.A., & Adedeji, A. (2018). Managing change: Transition from the traditional bureaucratic practices to E-government. *Acta Universitatis Danubius*, 10 (2), 26-41
- Oluwatoyin, A.M. (2025). Public sector innovation and change management in Nigeria: Challenges and prospects. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 9(8), 273-286
- Omole, C., Pillah, T. P., Ayeh, R. I. (2025). New-reforms in the civil service (2000-2024): An evaluation of ippis, monetization of fringe benefits and sales of Federal

Government properties. *IRASS Journal of Arts, Humanities and Social Sciences*, 2(5)129-138

Omotayo , O. A., Kehinde , O., & Alaba, J. S. (2025). E-governance and public service Delivery: Evidence from Nigeria. *Global International Journal of Innovative Research*, 3(2), 74–88. <https://doi.org/10.59613/global.v3i1.374>

Omowunmi,J.O., & Salako, O.A. (2020). Digital transformation and administrative efficiency in the Nigerian public sector: Issues and challenges.2<sup>nd</sup> FPISMS International Conference paper.

Osborne, S. (2020). *Public service logic: Creating value for public service users, citizens, and society through public service delivery*, (1<sup>st</sup> ed.). New York: Routledge

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), 35020. <https://doi.org/10.55267/djfm/16409>.

Sapru, K.R. (2013). *Administrative theories and management thought*, (3rd ed.). Delhi: PHI Learning Private Limited.

Satyro, W.C., Contador, J.C., Gomes, J.A., Monken, S.F.D.P., Barbosa, A.P.,Bizarrias,F.S., Contador, J.L., Silva, L.S., & Prado, R. G. (2024).Technology-organization-external-sustainability (TOES) framework for technology adoption: Critical analysis of models for industry 4.0 implementation projects. *Sustainability*, 16(24), 11064. <https://doi.org/10.3390/su162411064>

Shahiduzzaman, M., Abedin, M., Islam,S.,& Hasan, M.H (2025).Revolutionizing public management: A comparative analysis of npm strategies in Malaysia & Bangladesh. *International Journal for Multidisciplinary Research (IJFMR)*, 7(2), 1-12.

Sukare, B.M., & Abdullahi, A. (2025). Digital governance and public service delivery in Nigeria: Opportunities, challenges, and the way forward. *Journal of African Innovation and Advanced Studies*, 9(2), 17-21.

WHO (2024, February, 27).Civil registration and vital statistics. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/civil-registration-and-vital-statistics#:~:text=Barriers%20and%20challenges&text=Many%20barriers%20still%20prevent%20people,happened%20because%20of%20the%20pandemic>

Wilson, G.W., & Epelle, A.E. (2018). Public policy formulation and implementation in contemporary Nigeria. *International Journal of Research in Social Sciences*, 8(6), 175-185.