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**Exploring E-Government in Nigeria and the National E-
Government Master Plan**

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Abstract

The Federal Ministry of Communications and Digital Economy (FMCDE) was established in 2011 to promote the use of information and communication technology as a critical factor in Nigeria's transformation agenda. The FMCDE developed the Nigerian e-government Masterplan to fulfil its mandate of leveraging ICT to improve transparency in governance and improve the quality and cost-effectiveness of public service delivery in Nigeria. The Nigerian e-government vision outlined in the National e-government Plan aims to establish an open and digitised government that engages with citizens to improve efficiency in public administration, responsiveness to civil services, and transparency in governance, ultimately improving the quality of life of Nigerians. The plan recognises the imperative of employing science, technology, and innovation (STI) to create a knowledge-based economy and defines how the advancement of e-government in Nigeria will be implemented.

The study highlights the vision of e-Government for Nigeria, the expected results of e-Government, the principles guiding the implementation of e-Government in Nigeria, critical success factors, and several barriers impacting the optimal implementation of the National e-Government Master Plan. The primary objective and justification of the National e-Government Master Plan is to improve the efficiency and transparency of public administration services in Nigeria.

Keywords: *E-Government, National e-Government Master Plan, Digital Economy, Federal Ministry of Communications and Digital Economy (FMCDE)*

Introduction

Although it is well known that ICT (i.e., information and communication technology) has been used to improve efficiency and effectiveness in various government sectors around the world and that electronic governance has facilitated and streamlined societal development, public service delivery, and the business aspects of government (Umar, Ikechukwu and Shaka, 2022). There is still a need to create an organisational system to constantly optimise the implementation of these services to keep up with public demands. Countries around the world have initiated various innovations and initiatives to revitalise their public administration, and one such initiative is the use of Information Communications Technologies (ICT) in the public sector as a tool to deliver services in a more efficient and effective way (United Nations, 2008). ICT has been extensively deployed by governments to fine-tune and modernise their enterprise-wide processes; the proven advantages of these technologies have led to their widespread adoption across both the public and private sectors. The phrase "electronic government" or "e-government" was coined because of the use of technology to reform governance, as well as to offer services to and enhance relationships with stakeholders and beneficiaries (OECD, 2003; Grönlund and Horan, 2004). As electronic government developed over time, there are numerous distinct definitions of electronic government that have been made public (OECD, 2003; Grönlund, 2010). For instance, the OECD has numerous slightly varied definitions of what electronic governance is.

According to the Organisation for Economic Co-operation and Development (OECD, 2003), e-government refers to the application of ICT with a particular emphasis on the internet to enhance government operations and services. Also, according to the United Nations, e-

government refers to the utilisation of information technology in the realm of public administration with the aim of enhancing and consolidating workflows and processes, governing data and information, improving the provision of public services, and expanding communication channels to actively involve and empower individuals. '(United Nations, 2014).

Information systems serve as the backbone of today's business transactions. From the retail and service sectors to production and manufacturing, the role of ICT in supporting these processes has steadily increased since Tim Berners-Lee created the world's first web browser in 1990 (Beauchamp, 2023). However, the beginning of internet service provision in that period was an innovation. The concept quickly extended to developing and underdeveloped nations. In developing nations, it is hard to pinpoint the exact beginning of electronic government, but in Africa, it may be traced back to 1996, when African leaders agreed to the African Information Society Initiative (AISA) (Hafkin, 2009). Nigeria is one of the developing nations that has begun to embrace ICTs for modernisation and economic growth. Their use in Nigeria has evolved in situations where they have been adopted, in addition to the progress made by institutions (Kimenyi and Moyo, 2011).

In either a developed or developing society, the deployment of ICTs in the form of e-government systems is now unavoidable. Today, it is obvious that all 193 member states of the United Nations have an internet presence (United Nations, 2018). Countries worldwide have pivoted toward e-government to harness its capacity for optimising resource utilisation—especially within the public sector workforce—enabling the precise and timely completion of transactions while alleviating the geographic and logistical hardships faced by citizens in both remote regions and urban centres (Ndou, 2004). According to a comparative study on 'E-government between developed and developing countries', developing countries, unlike developed countries, are responding to the new concept of e-government by first overcoming infrastructural, cultural, technical, access, and ICT literacy challenges that have already been mastered by developed countries (Nawafleh, Sahemand, Obiedat, Rubaand, Harfoushi, Osama 2012).

The term 'implementation' can be understood in several distinct but interrelated ways. The Merriam-Webster dictionary defined 'implementation' as 'an act or instance of implementing something: the process of making something active or effective'. E-government in this research is the use of Information and Communication Technologies (ICTs) by governments combined with organisational change to improve

their structures and operations (Field, Muller, Lau, Gadriot-Renard, and Vergez, 2003). In underdeveloped nations, leveraging e-government to secure genuine, long-term advantages remains a tough task, often hampered by deep-seated structural and societal limitations (Joshi and Islam, 2018).

The Digital Economy

The digital economy is a globalised context, representing an innovation that challenges traditional concepts of business and trade organisation through Internet services. According to Brenner (2015), the assertive use of data for commercial endeavours serves to advance the digital economy. It involves using data to transition company models, enable new goods, deliver services, and improve utility through the introduction of innovative management strategies for economic transformation. Chohan (2020) posits that the notion of the digital economy emerged from innovations and recent technological advancements, as well as the digitalisation and transformation of regular human interactions aimed at enhancing global corporate activity.

This means that the digital economy is founded on internet connectivity for companies and has become the cornerstone of commerce and investment worldwide. There has been a concerted push to classify the scale of influence that digital economy platforms exert over conventional industries, highlighting the shift from traditional business models to interconnected ecosystems. It is a notion related to e-commerce that entails the electronic delivery of goods to customers. Thus, it is regarded as the sector of the economy that deals with intangible commodities in the digital realm at no extra cost. Furthermore, Chohan (2020) asserts that the digital economy emphasises the methods of conducting business and procedures since it enables billions of individuals to connect via the Internet, gadgets, data, and processes. It is predicated on the interrelation of individuals, organisations, and machines, aiming to facilitate cashless transactions in economic contexts, and has significantly influenced worldwide retail sales of consumer products.

The digital economy is supported by the proliferation of technologies in all business sectors to improve productivity. The digital economy, as observed by researchers, refers to an economic system and trade activities founded on digital computer technology facilitated by Internet access. It is also considered an online economy that is interwoven with the old economic system, originating from the daily actions of

individuals, organisations, and nations. Production and use of intangible assets have emerged as a vital aspect of the digital economy. Consistent investment in and the continual development of intangible assets, such as software, constitute a fundamental pillar of value creation and long-term economic success for enterprises operating within the digital economy. Foda and Patel (2018) assert that digital economy activities have markedly decreased expenses related to the organisation and coordination of intricate operations. Businesses operating at great distances are increasingly managed globally through efficient, centralised operations that may be geographically distant from both the sites of operation and the locations of suppliers or customers. As a result, the digital economy, as a novel economic paradigm, enabled people, groups, and organisations to broaden access to remote markets, hence facilitating the provision of goods and services across borders.

The E-government Index

The United Nations Department of Economic and Social Affairs (UN DESA) has been publishing the E-Government Development Index (EGDI) and the survey report biennially since 2001. Over the past ten editions, it has established itself as both a leading benchmarking reference on e-government and a policy tool for decision makers. The survey is the only global report that evaluates the development status of e-government of all member states of the United Nations. The e-government index presents a more inclusive and less subjective measure of the e-government environment of a country. It incorporates a country's official online presence, evaluates its telecommunications infrastructure, and assesses its human development capacity.¹⁵⁹ (UN e-Government Knowledge Base, 2024). The assessment measures the e-Government performance of countries relative to each other, rather than being an absolute measurement. It recognises that each country should decide the level and extent of its e-Government initiatives in accordance with its own national development priorities and the achievement of the SDGs.

S/N	Region	2024 EGDI Average
1	World	0.6382
2	Africa	0.4247
3	Europe	0.8493
4	Asia	0.699
5	Americas	0.6701
6	Oceania	0.5289

Table 3.1: Global and regional EGDI averages (Source: UN E-Government Development Index 2024 report of the United Nations Department of Economic and Social Affairs-UNDESA).

According to the findings of UNDESA (i.e., the United Nations' Department of Economic and Social Affairs), Africa exhibits a relative deficiency in e-government domains when compared to other regions globally. It scores 0.42 (on a scale of 0 to 1), compared to the worldwide average of 0.64, and over fifty percent of the continent's countries offer an average of 12 online services. There are only five countries, namely Nigeria, Rwanda, Angola, Egypt, and South Africa, that provide between 20 and 21 online services. (Cenderello and Bertrand, 2022). The reason for this poor performance cannot be attributed only to a lack of political will but also to economic, social, and other issues that include challenges in organisational development.

Undoubtedly, e-Government serves as a vital instrument for the effective management of public sector activities on a global scale, streamlining processes and enhancing institutional transparency. The implementation of this technology has significantly expedited the provision of public goods in developed countries. In numerous countries around the world, there is a growing recognition of the need to improve the public sector by leveraging emerging technologies to improve its effectiveness, efficiency and citizen-centricity. This involves using emerging technologies to facilitate the prompt delivery of vital services to the general population. Hence, it has been recognised that the use of ICT (information and communication technology) can serve as a powerful instrument to facilitate the government's process of reinvention in a more expeditious, cost-effective, and efficient manner (Omeire and Omeire, 2014). The concept of e-Government involves the use of technological advances to improve the provision of public sector services, with the ultimate goals of promoting accountability, openness, promptness, and efficiency (Azeez, Abidoye, Adesina, Agbele, and Venter, 2012). Governments around the world are increasingly adopting

and implementing information and communication technology (ICT) as a public service. This shift is driven by the recognition that ICT can serve as a valuable tool for enabling public sector organisations to transition from being internally focused on administrative tasks to becoming externally focused on delivering services to the public. (OECD, 2003).

The development of e-government services remains problematic in many developing countries; this struggle cannot be ascribed solely to limited resource, but also to a critical lack of appropriate models to guide effective implementation (Joshi and Islam, 2018).

The United Nations Department of Economic and Social Affairs (UN DESA) has been publishing the E-Government Development Index (EGDI) and the survey report biennially since 2001. This publication has evolved over ten editions to become a definitive benchmark for e-government, serving as an essential strategic resource for shaping public policy. The survey is the only global report that evaluates the development status of e-government of all United Nations Member States. The assessment measures e-government performance of countries relative to one another, as opposed to being an absolute measurement. It recognises that each country should decide upon the level and extent of its e-government initiatives in accordance with its own national development priorities and achieving the SDGs. The survey is intended mainly for policymakers, government officials, academia, civil society, the private sector and other practitioners and experts in the areas of sustainable development, public administration, digital government and ICTs for development. EGDI serves as a benchmarking and development tool for countries to learn from each other, identify areas of strength and challenges in e-government, and shape their policies and strategies in this area. (UN E-Government Knowledgebase, 2024)

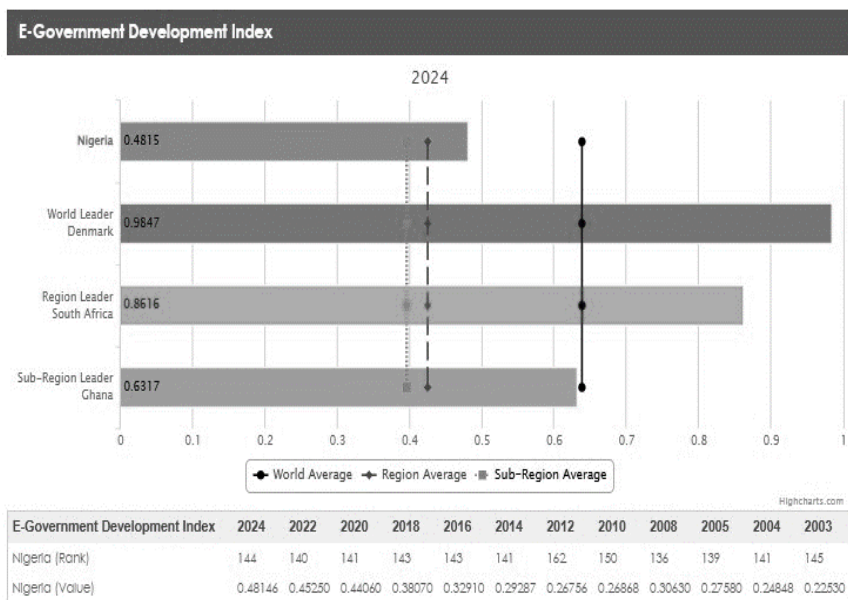


Figure 3.1: Nigeria's EGDI Comparative Ranking 2024 (Source: Department of Economic and Social Affairs, United Nations E-Government Survey, 2024)

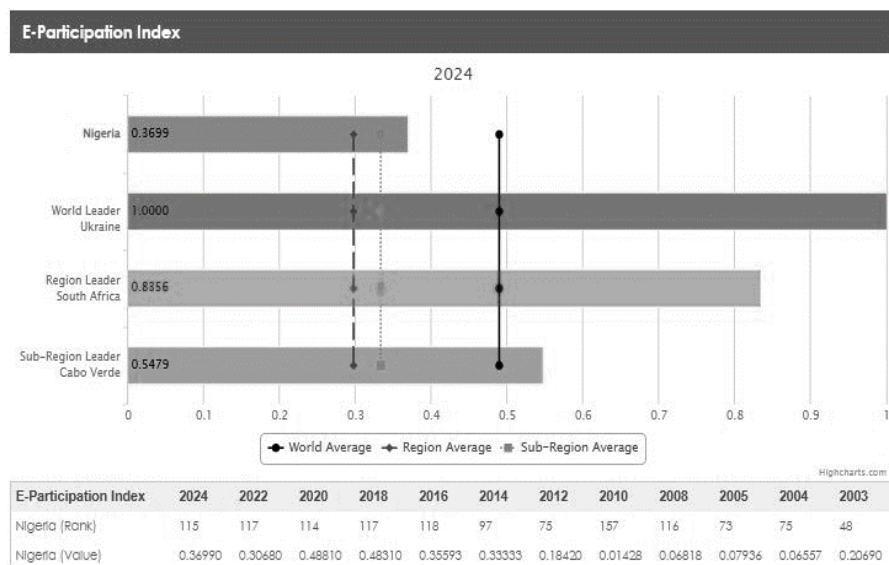


Figure 3.2: Nigeria's E-Participation Index Comparative Ranking 2024 (Source: Department of Economic and Social Affairs, United Nations E-Government Survey, 2024)

Country	Rating class	EGDI rank	Subregion	OSI	HCI	TII	EGDI (2024)	EGDI (2022)
South Africa*	V2	40	Southern Africa	0.8872	0.8026	0.8951	0.8616	0.7357
Mauritius*	V1	76	Eastern Africa	0.5903	0.7456	0.9159	0.7506	0.7201
Tunisia	HV	87	Northern Africa	0.5951	0.6497	0.8357	0.6935	0.6530
Morocco	HV	90	Northern Africa	0.5618	0.6078	0.8827	0.6841	0.5915
Seychelles	H3	92	Eastern Africa	0.4638	0.6769	0.8913	0.6773	0.6793
Egypt	H3	95	Northern Africa	0.7002	0.6150	0.6946	0.6699	0.5895
Ghana	H2	108	Western Africa	0.6084	0.5586	0.7281	0.6317	0.5824
Kenya	H2	109	Eastern Africa	0.7770	0.5271	0.5901	0.6314	0.5589
Cabo Verde	H2	111	Western Africa	0.6892	0.5694	0.6128	0.6238	0.5660
Botswana	H2	112	Southern Africa	0.3985	0.5719	0.8649	0.6118	0.5495
Eswatini	H2	113	Southern Africa	0.4557	0.5836	0.7851	0.6081	0.4498
Namibia	H2	114	Southern Africa	0.4996	0.5738	0.7288	0.6007	0.5322
Algeria	H2	116	Northern Africa	0.3320	0.6418	0.8129	0.5956	0.5611
Rwanda	H2	118	Eastern Africa	0.8207	0.5467	0.3724	0.5799	0.5489
Gabon	H2	121	Middle Africa	0.3187	0.5772	0.8263	0.5741	0.5521
Côte d'Ivoire	H1	124	Western Africa	0.5219	0.4848	0.6693	0.5587	0.5467
Libya	H1	125	Northern Africa	0.0808	0.5951	0.9639	0.5466	0.3375
Zambia	H1	130	Eastern Africa	0.4958	0.6225	0.5088	0.5424	0.5022
Senegal	H1	135	Western Africa	0.4779	0.3380	0.7328	0.5162	0.4479

Figure 3.3: Countries leading the development of e-government in Africa, 2024 (Source: Department of Economic and Social Affairs, United Nations E-Government Survey).

Barriers of E-Government Implementation

There are several obstacles that could prevent e-government from fulfilling its potential. The complexity and diversity of e-government projects suggest that there are several obstacles and difficulties in managing and implementing them. These barriers are often multi-dimensional, ranging from technical interoperability to deeply ingrained bureaucratic resistance. The following are the most significant and typical obstacles and challenges:

a) **ICT infrastructure:** Despite the gradual yet consistent advancement of e-government in Nigeria, the introduction of the General System for Mobile communication (GSM) network in 2001 significantly bolstered the nation's economic development. The Nigerian Communication Commission (NCC) reports that Nigeria's tele-density is 78.1 per cent as of January 2025 (Consumer Connect, 2025). Some technological challenges that arise with the deployment of e-government programs include the absence of common standards and infrastructure that is interoperable across departments and agencies. One of the biggest obstacles to e-government is acknowledged to be ICT infrastructure. To facilitate proper information sharing, create new avenues for communication, and provide new services, online work is necessary (Ndou, 2004). An architecture that offers a consistent set of guiding

principles, models, and standards is required for the shift to electronic governance. According to Sharma and Gupta (2003), argue that a robust technological infrastructure is necessary to implement a comprehensive e-government framework. Therefore, the government must provide an efficient telecommunications infrastructure to provide e-government services. They added that how different infrastructures' capacities are organised and capitalised with an integrated focus will determine how well e-government is implemented.

b) **Privacy.** Security and privacy are major barriers to the adoption of e-government in the interest of citizens. (OECD, 2003). P According to Basu (2004), privacy is the assurance of a suitable degree of protection for data that are attributed to a specific person. The government must protect citizens' rights to privacy by only processing and gathering personal information for appropriate reasons (Sharma and Gupta, 2003). Tracking the website, sharing information, and exposure to or improper use of personal data are common concerns. The concern that e-government systems could be used for state surveillance and privacy violations is a significant barrier to public adoption. According to Seifert (2003), e-government must be viewed through the lens of protecting personal privacy. In the realm of e-government, addressing privacy concerns necessitates a combination of technical safeguards and policy interventions. To boost public trust in e-government services, it is also necessary to address privacy concerns in networks in an efficient manner. Applications of e-government depend on citizens' trust that any personal information given to governmental entities will be handled carefully and with privacy. According to Basu (2004), many citizens in underdeveloped nations choose not to take advantage of e-government potential because they are so concerned about privacy and confidentiality difficulties. According to Teeter and Hart (2003), a thorough privacy policy should outline citizens' rights to privacy and require that personal information be gathered and used only for appropriate purposes.

c) **Security.** Information system security refers to safeguarding data and systems from unintentional or deliberate disclosure to unauthorised access, as well as against unauthorised alteration or destruction (Layton, 2007). It relates to controlling access to the information itself and safeguarding the information architecture, which includes the network, hardware, and software assets (Basu, 2004). Additionally, Seifert (2003) notes that information security, also known as computer security or cybersecurity, is a significant e-government concern since it is essential to

the relationship of trust between the public and the government. To solve these issues, it is crucial to implement security standards and procedures that live up to public expectations (Sharma and Gupta, 2003). Network and document security are the two categories under which security falls. Maintenance and e-infrastructure protection, such as firewalls and data access controls, should be part of it. Additionally, achieving security objectives in e-government applications requires the use of security technologies, such as digital signatures and encryption, to safeguard user IDs, passwords, credit card numbers, bank account numbers, and other similar data that are transferred over the Internet and stored electronically (Feng, 2003). To protect themselves, people must be taught the value of security precautions such as secret passwords. Although security will continue to be a barrier to e-government, Cohen and Emicke (2002) note that this will not significantly hinder its advancement as the public comes to understand and work with its sporadic shortcomings. They also mentioned three important factors that influence security success. The first involves constant improvements and improvements to stay one step ahead of criminals. The second is that to discourage potential criminals, security should be conspicuous and intimidating. Lastly, it must be acknowledged that no security system is flawless and that problems can be solved in the end. However, as they oversee gathering, preserving, and disseminating sensitive or private data, government agencies should think about ways to secure both the data they collect and their websites. To address risks and breaches, a group of security experts should be established. The establishment of a governing authority and an infrastructure encryption system must be a priority (Feng, 2003).

d) Policy and Regulation Issues. According to Feng (2003), e-government is an organisational problem rather than a technical one. To address electronic activities such as electronic archiving, electronic signatures, information transmission, data protection, computer crime, intellectual property rights, and copyright issues, various new laws, regulations, and governmental changes are necessary for the implementation of e-government principles and functions. Dealing with e-government entails entering into a digital agreement or contract that must be recognised and protected by a formalised law that safeguards and secures these kinds of procedures or activities. Laws pertaining to electronic business and electronic government are still lacking in many nations. Ensuring privacy, security, and legal recognition for electronic interactions and signatures requires robust protections and legal reforms.

These measures are essential to building trust in digital frameworks and securing the integrity of electronic transactions (Cavoukian, 2012). A comprehensive perspective that is not solely centred on technology must be incorporated into the endeavours. Before the Internet can run properly, new policy directions and legal reforms might need to be implemented. Old regulatory frameworks, conflicting and overlapping authorities, and outdated legislation can all significantly impede or complicate a project.

e) **Lack of qualified personnel and training.** Lack of ICT skills might be another significant obstacle to an e-government endeavor. This is especially problematic in developing nations, where there has long been a shortage of skilled workers and insufficient training for human resources (UNPA and ASPA, 2001). To successfully implement e-government, the right skills must be available. Technological, commercial and managerial human skills are necessary for e-government. In addition to the ability to use and manage online processes, services, and customers, technical skills are required for the implementation, maintenance, design, and installation of ICT infrastructure. Knowledge management programmes that focus on staff training are necessary to solve difficulties related to human capital development. These initiatives aim to improve the fundamental skills needed to use e-government. As the pace of change accelerates and new technologies, processes, and competitive models emerge, continuous access to training becomes an essential requirement. All governments must implement a training and skill-learning process to fully reap the economic benefits of ICT (OECD, 2003).

f) **Lack of partnership and collaboration.** In the process of developing e-government, collaboration and cooperation between public and private organisations, as well as at the local, regional, and national levels, are crucial components. Cooperation and teamwork are difficult qualities to attain, though. To preserve their authority, power, and hierarchical status, governments frequently exhibit profound resistance to the establishment of open and transparent institutions, viewing transparency as a threat to their centralised power (Nodu, 2004). People have mistrust in their governments, particularly in areas with a history of widespread corruption, political unrest, or authoritarianism. Building public and stakeholder trust in government is crucial to ensuring that they will be partners in the e-government endeavours (Carvin et al., 2004). To provide resources, expertise, and capabilities that the

government may not have, cooperation between the public and private sectors is also required. A "new" development paradigm that emphasise collaboration among stakeholders in knowledge-based development programs is starting to take shape. The private sector should be encouraged to engage in the creation and deployment of e-government by the government, which should act as a facilitator (Nodu, 2004).

g) **Digital divide.** In the introduction of e-government, proficiency with computers and the Internet has become essential, and a lack of these abilities might result in social exclusion or marginalisation (UNPA and ASPA, 2001). The disparity in opportunities between people with and without the Internet is known as the "digital divide." The benefits of online services will not be available to those without Internet access (OECD, 2003). The digital gap refers to the fact that not all citizens today have equal access to computers and the Internet, either because they lack the necessary funds or skills or for other reasons. To use e-government apps, people must be computer literate. To allow participation in e-government development applications, the government should provide basic computer and Internet skills training to its staff and residents. Furthermore, Smith (2002) notes that providing computer access in locations like supermarkets and libraries may close the gap between homes with and without internet. By decentralising access points, the state can mitigate the socio-economic barriers to digital participation. According to Feng (2003), the biggest obstacle to the growth of e-government was thought to be the absence of Internet connection among some segments of the population. In fact, low-income or vulnerable people cannot use services that are tailored to their needs due to lack of access. According to the United Nations (2008) report, the cost of technological impediments to establishing and maintaining electronic government services rises as the digital divide widens in developing nations.

h) **Culture:** The cultural ramifications of new technology can be a barrier to the adoption of e-government, rather than technical ones. Cultural influences are more likely to affect subjective conditions and personal traits than they are to affect the actual circumstances surrounding the creation and spread of new technology (Hofstede et al., 2010). Individual behavioural habits and cultural norms influence how citizens and policymakers use technology. Many people resist change and adopt new technology slowly and carefully because culture has a great impact on how they see the world (Feng, 2003). Successful e-government

requires adopting a corporate perspective and strengthening working ties between internal departments and external agencies, according to Hackney and Jones (2002). Significant cultural shifts were believed to be required to accomplish this. To accommodate internal cultural shifts, organisational growth should be incorporated into the implementation process. According to Chang (2002), social structure, religion, language, education, economic philosophy, and political philosophy are some of the elements that influence culture. Technical improvements include structural and cultural changes. While less visible than technical upgrades, cultural shifts require the same level of rigorous planning.

Leaders and Management Support: According to the literature, an innovation has a lower chance of being accepted if senior management does not support it. Therefore, to successfully implement e-government, the highest level of government must support it. The term "top management support" refers to the commitment of high-level executives to fostering an environment conducive to e-government adoption. As a result, it is crucial to the acceptance and use of e-government (Akbulut, 2003). To overcome the innate resistance to organisational change, to gather the resources needed to improve management, and to establish and sustain the organisation-wide commitment to new ways of conducting government, leadership involvement, and clear lines of accountability are necessary for making management improvements (McClure, 2001). High-level leadership's involvement and an integrated IT vision are essential for vertical e-government planning, obtaining the resources required, inspiring officials, supporting interactions with external partners and stakeholders, and coordinating across ministries and agencies. Political leadership and an integrated IT vision are what propel the growth of e-government, as seen in developing nations and transitional democracies. Although leaders who believe they stand to lose from the implementation of e-government cannot be relied upon for sustained support, those who see a potential benefit from promoting e-government are more likely to support such initiatives, even in the face of challenges (Seifert and Bonham, 2003). To effectively plan and administer ICTs in all public sectors, the government must train the next generation of government leaders, managers, and administrators. This training should focus on access opportunities, economic development, and the efficient delivery of public information and services (OECD, 2023).

E-Government in Nigeria

The Nigerian Federal Ministry of Communication, Innovation and Digital Economy (FMCIDE) was founded in 2011. The organisation was established to leverage ICT as a catalyst for Nigeria's transformation agenda. By targeting job creation, economic development, and governance integrity, it aims to modernise the public sector and stimulate digital innovation across the economy. To promote the use of e-government systems throughout all Ministries, Departments, and Agencies (MDAs), the FMCIDE has four major objectives, as follows:

- a) Connected government
- b) Informed citizenry
- c) Open data
- d) Open government collaboration.

Vision	World Class Open Government		
Attributes	Transparency	Efficiency	Quality of service
Objectives	Enhanced presence	Transactional presence	Connected presence
Policies and Strategies	5 Policies	10 Strategies	
	Powerful Leadership	1.Establish the Presidential Committee on ICT/e-Government	2.Identify e-Government Champions
	Mass Literacy for ICT and e-Government Skills	3.Expand Capacity Building of e-Government	4.Publicise e-Government Initiatives
	Sufficient Budget for e-Government	5.Draw special Budget on e- Government	6.Create variety of funding sources
	Global standard e-Government	7.Develop Adequate infrastructure and Application	8.Strengthen RandD and Education in ICT
	Government Process Re-engineering	9.Establish Legal framework for e-Government	10.Establish Organisational Framework for e-Government

Table 5.1: Vision of the E-Government in Nigeria (Source: Nigeria e-Government Masterplan)

5.1 The National E-Government Master Plan

The national e-government master plan was developed in collaboration with the Korean government to enable the adoption of evidence-based

e-Government practices in all Ministries, Departments, and Agencies (MDAs) of the Federal Government. The department is tasked with the extensive execution of the plan aimed at fully transforming government transactions, improving the overall experience of citizens and businesses that interact with the government by optimising services, increasing citizen participation, and advancing transportation. The government's stance on leveraging digitalisation to boost public sector efficiency is reflected here. This strategic focus targets the elimination of manual processes, fostering a more transparent and responsive relationship between the state and its citizens. The primary objective and justification of the National e-Government Master Plan is to improve the efficiency and transparency of public administration services. The objectives of the National e-Government Master Plan (NITDA, 2020) are the following.

- a) To improve the structure and efficiency of government management.
- b) To improve government processes and service delivery.
- c) To improve government transparency and accountability.
- d) To promote digital literacy and technology awareness among government officials and citizens.
- e) To enhance collaboration between various organs of the government.
- f) Reduce the overall cost of governance.
- g) Enhance private sector partnerships in the service delivery model.
- h) Recognise citizens as customers of the government and develop strong customer relationship programmes.
- i) To provide multiple access and delivery channels for citizens, businesses, and government employees.

The Federal Ministry of Communications and Digital Economy (FMCDE) developed the Nigeria e-Government Master plan to fulfill its mandate which is to; “Utilise ICT to drive transparency in governance and improve the quality and cost effectiveness of public service delivery in Nigeria”. This was achieved through study, collaboration, and wide engagement with relevant parties, supported by the Korea International Cooperation Agency (KOICA). The vision and objectives of the National e-Government Master Plan were specifically designed to align with the Federal Government Economic Recovery Growth Plan (ERGP). The Economic Recovery and Growth Plan (ERGP), a Medium-Term Plan for 2017–2020, is based on the Strategic Implementation Plan and aims to restore economic growth by harnessing the ingenuity and resilience of the Nigerian population, the nation's most valuable assets.

The function of government in the 21st century must transition from being a comprehensive provider of citizens' needs to a catalyst for removing obstacles that hinder innovation and market-driven solutions.

The plan acknowledges the necessity of using science, technology, and innovation (STI) to establish a knowledge-driven economy. The ERGP aligns with the objectives of the Sustainable Development Goals (SDGs) since its programmes address the three pillars of economic, social, and environmental sustainability. In this context, the primary objective of the e-Government Masterplan is to improve transparency, efficiency, and the quality of public service administration by advancing the legal system, organisational framework, government service delivery, human capital, technological infrastructure, and public awareness. The proposed policies aim to enhance the quality of life of citizens by strengthening national competitiveness, supporting a market economy, encouraging participatory democracy, and increasing openness in the public sector. A fundamental stipulation of the National E-Government Masterplan mandates that all government entities establish a Digital Transformation Technical Working Group to collaborate with the Ministry of Communications and Digital Economy, ensuring the cohesive and synchronised execution of projects, programmes, and policies.

There are 10 principles that guide the successful implementation of the Nigerian e-government Master Plan, and they (NITDA, 2020) are the following:

- a) **More attention to organisational changes:** The primary goal of e-government lies in transformation and social change rather than IT initiatives. The focus has shifted toward organisational changes, prioritising them over application developments and technicalities.
- b) **Consistent policy throughout implementation phases:** The remarkable achievement of e-Transformation is not made in a day or two, but it is the result of strenuous efforts and a consistent policy line throughout the implementation period.
- c) **Inclusion of users as a feedback mechanism:** The success of e-Transformation projects is not determined by the IS outputs but by the outcomes perceived by the users. The inclusion of users in all sectors of the e-government system as a feedback mechanism is critical to success.

- d) **Shared Vision among All Stakeholders:** Vision is the reality of tomorrow, not yet realise today. The shared vision is the source of leadership stimulus to propel the e-Government project and the energy for positive climate creation.
- e) **Focus on the Citizens and not on the Government:** The focus should be on citizens, not on government. IT is simply a vehicle for value creation; therefore, we need to think hard about what the citizens really want from e-government services.
- f) **Establishing a Data Reference Model (DRM):** Global databases must first be designed to cover all government functions. Securing data as a common shared resource for all business units is the key to a successful improvement in the responsiveness of the entire government and the source to develop a variety of services.
- g) **New Practices for Managing Data by Attributes:** Data management practices must be changed to accommodate new breeds of data. Data management should shift toward attribute-based practices to ensure that modern data types, such as social media streams and real-world sensor data, be captured.
- h) **Plan for tomorrow:** The e-Transformation plan must be set up for tomorrow and not today. The true ICT revolution is yet to come. We need to be attentive to the new opportunities provided by the Internet of Things (IOT), Artificial Intelligence, and Blockchain.
- i) **Adaptive Officials and the Public:** A way to educate and train government officials and the public to make them adapt to emerging information environments must be found. We need a new breed of people who are capable of interpreting and utilising multidimensional information.
- j) **Laws Adaptable to Environmental Changes:** Laws adaptable to environmental changes should be prepared in advance. Management of growth simply means management of timing. Anticipating the bust that typically follows rapid growth is essential, given the tremendous social costs involved.

5.2 Nigeria e-Government Masterplan Seven Critical Factors

To successfully implement e-government in Nigeria, the following seven critical success factors that underlie the notable achievement in e-government of advanced countries were also adopted by the FMCDE (NITDA, 2020):

- a) **Adoption of the Nigerian e-Government Master Plan** as a National Agenda
- b) **Sustained Investment in Electronic Governance.** Supported investment is required to transform the nation using ICT/e-Government. This means growing investment in e-Government to 1% of the annual budget, as well as creating and using the Information and Telecommunication Promotion Fund to build e-Government projects.
- c) **Appropriate Institution for Each Phase of e-Government Implementation:** To sustain e-Government implementation, appropriate laws need to be enacted during each phase, ensuring a positive enabling environment for e-government. This involves the establishment of legal systems and the empowerment of the president to the project steering organisation to maintain Nigeria's e-government policies and strategies consistent.
- d) **Dedicated Organisation Structure for the Implementation of the e-Government:** It is critical to form a dedicated organisation structure for the implementation of e-government. This means:
 - i. A supervisory committee shall be established directly under the presidency.
 - ii. Chief Information Officers (CIOs) shall be designated for central and regional e-governments, thus creating a streamlined support structure.
 - iii. Specialised e-government technical support agencies, including NITDA and GBB, shall be utilised for fieldwork required for the projects.
- e) **Balance between Demand for and Supply of E-Government Services:** The Nigerian government needs to develop policies for balanced development of an information-oriented society on the

demand and supply side of the IT industry so that both sides can maintain a virtuous cycle where one side enforces the other. This requires efficient role division with the government taking care of e-government policymaking, IT companies providing technology and skills, and citizens.

- f) **Change Management for Public Officers in Emerging ICT Environment:** What is more important than anything else is creating a positive environment for the potential users, like government officials and the public. A scheme for change management in emerging environments needs to be developed to overcome resistance from the users, which primarily is caused by the fear of workforce reduction and the avoidance of using information systems.
- g) **The Capacity Development Program for Civil Servants and Citizens** Capacity Development Programme can be used as a catalyst for government reform. A dedicated training organisation for e-Government must be established. Optimised e-government training courses for Nigeria must be developed.

Expected outcomes

The strategic outcome from the proposed e-Government Masterplan is a high-performing government with the following features.

- a) High performance culture: accountability for performance; citizen-centric government; integrated government
- b) Right People: - Competent, committed, non-corruptible public officers - Public service as employer of choice
- c) Responsible Financial Management - Fiscal Sustainability - Effective and efficient use of financial resources

The implementation results of the e-Government Master Plan are mapped to the improvement of the e-Government Development Index and the e-Participation Index. These are measurable impacts that will translate e-governance from the emerging stage to the connected stage of development.

Nigeria e-Government Expected Outcomes		
Components	Classifications	KPIs
E-Government Development Index	Online Services Index	Emerging government documents (e.g. policy, legislation) linkage with other agencies providing news and information directory
		Enhanced interactive online services available downloadable civil application form video services multi-language services partial online applications (e.g., online request, post service)
		Transactional online applications authentication services e-voting downloadable/up-loadable forms issuance of various certificates and licenses
		Connected Web2.0 available facilitating communications with citizens integrating multi-agencies services tailored e-services for citizen's whole life and citizen's engagement
		Environment information and services available on environmental issues engaging citizens into environmental issues
		Openness open portal for public information open data site and its related legislation and institutions open data directory and index available
	Telecommunication Infrastructure Index	PC penetration Internet users telephone line mobile subscription fixed broadband fixed internet subscription
	Human Capital Index	adult literacy school gross enrollment rate
E-Participation Index	E-Information: Policy Available Online	provide information to facilitate citizen's

		engagement notice of online policy forum schedule online policy information
	E-Consultation: Online Participation in Policy	collect citizens opinion and provide feedback for citizens online survey of public opinion online chatting, instant message and blog
	E-Decision: Online Decision Making	engaging citizens in policy making online forum, online petition and online voting

Table 5.2: Expected Outcomes for e-Government (Source: National E-Government Plan)

Conclusions

The Nigerian eGovernment Master Plan aims to enhance the transparency, efficiency, and quality of public services. Aligned with the Economic Recovery Growth Plan (ERGP), it seeks to drive inclusive growth and structural economic transformation by improving both public and private sector performance (NITDA, 2020).

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