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# INFRASTRUCTURAL DEFICIT AND INFORMATION TECHNOLOGY: THE PROSPECT OF ENHANCING DIGITAL GOVERNANCE THROUGH PUBLIC-PRIVATE PARTNERSHIP

**Iseoluwa Raphael Olayinka[1], Emmanuel Temitope Abiodun[2], Abdullahi Abiodun Oyekanmi[3] & Adegboyega Francis Kolade[4]**

[1,3&4]Department of Political Science. Tai Solarin University of Education
Ijebu-Ode, Ogun State. Nigeria.
[2]Department of Political Science, Sikiru Adetona College of Education, Science and Technology
Omu-Ajose, Ogun state. Nigeria
olayinkaiseoluwa@gmail.com[1], emmanuelhope2065@gmail.com[2],
oyekanmiabdullahi655@gmail.com[3], jinkola1957@yahoo.com[4]

## Abstract

*The appreciable effects of information technology have ingeniously transformed conventional global practices in all walks of human endeavor. Nevertheless, Nigeria is yet to fully embrace the efficacy of digital governance toward enhancing effective service delivery in its public sector. This has been attributed to numerous challenges such as; digital divide, infrastructural deficit, and digital illiteracy, lack of viable database, and porosity of the cyberspace, among others. The aforementioned have alluded to government involvement in various sectors of the economy, which consequently prevent the government from prioritizing the Information Communication sector. Thus, the study examines the possibility of minimizing the infrastructural gap through public-private partnerships, towards ensuring the serviceability and effectuality of digital technologies in Nigeria's public sector. The paper relied essentially on secondary sources of data, using an ex-post-facto research design. The paper recommended engagement of corporate organizations, religious institutions, professional and trade associations, non-governmental organizations, and government at all levels in minimizing the infrastructural gap militating against the efficacy of digital governance in Nigeria's public sector.*

**Key Words:** Digital Governance, Information Communication Technology, Infrastructural Deficit, Public-Private Partnership, Nigeria.

## Introduction

Many countries in the world and indeed African nations switched to the modern way of running governmental activities through information technology at the inception of the new millennium in the early 2000s. The importance and impact of e-governance on public service delivery cannot be over-emphasized, nor can it be downplayed (Abasilim & Edet, 2015). The benefit of e-governance to the running of public service in Nigeria is enormous. E-governance in Nigeria as a developing country can be traced to the formation of the Nigerian National Information Technology (NNIT) policy in the year 2000 by the administration of Olusegun Obasanjo. The essence of the policy was to make Nigeria an Information Technology (IT) capable country in Africa and a key player in the information society and also use IT for education; creation of wealth; poverty eradication; job creation; governance; health; agriculture (NITP, 2000).

The aforementioned innovational stride is geared towards ensuring that public sector organizations provide an expanded range of services to citizens in a manner that is systematic and cost-effective leveraging on the adoption of IT in its day-to-day activities notwithstanding, Ministries, Departments, and Agencies (MDAs) seem not to fare well in the implementation of e-governance in their services consequent upon some challenges faced by this sector. Prominent among these challenges is the identifiable infrastructural deficit which hampered the effectiveness of the use of IT by government MDAs (Gberevbie; Ayo; Iyoha; Duruji & Abasilim, 2015; Olaopa, 2014; Bansode & Patil, 2011; Okwueze, 2010; Abdel-Fattah & Galal-Edeen, 2008; Ayo & Ekong, 2008 & Dode, 2007).

It is based on this that the main thrust of this paper is advanced. This paper is subdivided into six sections aside from the introductory part. The first section presents conceptual clarification of e-governance, information Technology, infrastructure, and infrastructural deficit. The second dwells on the theoretical framework and methodology. The third section deals with the identification of the nexus between Information Technology and efficiency in public service delivery in Nigeria. The fourth and fifth sections focus on the impediments against the proper application of IT in the public sector and ways of enhancing e-governance through the engagement of other sectors in society respectively. While in the sixth section, a conclusion and possible way out are made.

## Objectives
The main objectives of this paper are:
a.      to identify the challenges facing e-governance implementation in Nigeria's public service and
b.      to suggest ways by which these challenges can be taken care of if e-governance implementation must be realized in Nigeria's public service.

## Research Questions
**a.**      What are the challenges facing e-governance implementation in Nigeria's public service?
**b.**      How can these challenges be ameliorated for effective e-governance implementation in Nigeria's public service?

## Conceptual Clarifications
### Information Communication Technology (ICT)
Information Communication Technology is a broad term which it's used across all areas of human endeavor such as E-Commerce, E-governance, Banking, Agriculture, Education, Medicine, Defense, and Transport, among others (The Scientific World, 2020).   Therefore, the succinct understanding of the term depends on the discipline under consideration. Generally, ICT encompasses the usage of computers, telecommunications devices, internet technologies, and services, or the management of data in accomplishing a given task (Brown, 2020). Concurrently, the growth of ICT birthed innovational strides like E-Administration, which has become an integral part of new public management in this contemporary era. Thus, E-Administration is the automation of administrative functions and operations using electronic and computer-based technologies (Taylor, 2022).

Singh (2019) identified three core aspects of public administration which Information Communication Technology (ICT) plays an instrumental and indispensable role. This includes; internal administration, planning, and decision making, as well as service delivery. ICT, according to him, transforms internal administration by bringing electronic means as a replacement for the conventional mode, ensuring accountability and transparency in its operation. Just as easy access to reliable information, geographical location, proper planning, computerization of government departments, record keeping, connectivity, and swift transfer of  files through Local Area Networks (LAN) and  Wide Area Networks (WAN) enhances planning and decision making, while the ability to pay utility bills, request for the services of public officers (such as police, firefighters, health officers) through digital platforms, sort tax, land, book public transport, among others facilitate effective public service delivery.

Because of the aforementioned, the functionality of ICT or any digital platform revolves around the dyadic interaction, and systemic interconnectivity between both visible and invisible components. Therefore, the efficacy of Information Communication Technology (ICT) within an administrative context cannot be understudied by considering the state of public infrastructure, digital literacy and technological know-how of the country in question.

### Infrastructural Deficit:  The Rationale for Public-Private Partnership
The infrastructural deficit has often been used to describe the state of physical infrastructure within a defined territory. Law Insider (2022), conceived it to be a considerable rise in the number of

capital projects required to expand, upgrade, or rehabilitate physical infrastructure in comparison to the state's present funding capability. Similarly, Sherraden (2011) referred to the infrastructural deficit as a significant decrease in infrastructural allocation, as well as a steady rise increase in the need for and expense of developing new infrastructure. However, it could be deduced from the aforementioned conception that the term indicates the present state of infrastructure in a given entity compare to the population of a geographical entity, their basic need, the capability and the readiness of the government or any constituted authority saddled with such responsibility is a potent yardstick for determining whether there is an infrastructural deficit or not.

Most developing countries are confronted with challenges that stunt developmental growth, which has significantly degenerate to the infrastructural deficit. As of June, 30 2021, it was reported the total infrastructural need of developing countries across the globe will exceed $40 trillion by 2035 (Cohen, 2021). Correspondingly, Nigeria is estimated to need about $1.5 trillion to close the country's infrastructure deficit (Ukpe, 2021). With the nature of governance in the country and other part of the world, government remain the sole owner and provider of infrastructural facilities, while in exceptional cases they are at the center of determining or regulating institutions involved in facilitating infrastructural utilities to ease the livelihood of the citizens (Edwards, 2017).

Thus, the buck of infrastructural deficit stops on the government table. And this could be alluded to by several stances as huge security spending. For instance, the defense sector since 2008 has received; N444.6 billion (20.09%) of the N2.213 billion budget; and in 2009, N233 billion or 7.64% of the N3.049 trillion appropriated, 2010-N264 billion (5.03%) of N5.248 trillion; 2011-N348 billion (7.0%) of N4.972 trillion; 2012-N921.91 billion (18.90%) of N4.877 trillion budget; and 2013-N1.055 trillion (21.16%) of the N4.987 trillion expenditures. In 2014, Defence chalked up N968.127 billion or 19.51% of the N4.962 trillion appropriated, came down to N388.459 billion (7.67%) of N5.068 trillion budget in 2015, 2016-N429.128 billion (7.08%) of N6.061 trillion budget; and 2017, N465.87 billion or 6.26% of the final N7.444 trillion budget., 2018, N580.145 billion or 6.26%, while N 159. 13 billion and 100 billion was allocated to the Defence ministry in 2019 and 2020 respectively, while 21.24 billion, was proposed in the 2021 fiscal budget (Sunday Vanguard's checks cited in Ndujihe (2018); Baiyewu, (2019); Punch News, October 29, (2019); Budget Office (2021).

This among other factors like; stunt economic growth, huge debt profile, misappropriation of public funds, as well as the involvement of the government in virtually all sectors of the economy hinders the government from prioritizing the improvement of modern public infrastructure such as improving the Information Communication Technology (ICT), while the conventional physical infrastructure like roads, public assets, and utilities and assets still lag compared to the citizen to human population ratio and the global best standard.

In light of the aforementioned, scholars have identified Public-Private Partnership (PPP), as a relief to the government's burden in terms of improving the state of public infrastructure. PPP entails the partnership between government agencies and private enterprises to finance, construct or maintain public infrastructure (Brock, 2022). Although there are models of PPP initiatives, and this includes; Concessions, Build Operate Transfer (BOT), Design Build Operate (DBO), Build Own Operate (BOO), Build Own Operate and Transfer (BOOT), Design Build and Finance (DBF), Design Build Finance Maintain and Operate (DFMBO), Design Construct Maintain Finance (DCMF), Operation and Maintenance (O & M) (World Bank, 2022).

**Theoretical Framework**

This paper is anchored on resource dependency theory which explains the impact of outside forces on the growth of an entity towards the attainment of its core mandate or other desired objectives. The theory as postulated Gerald R. Salancik and Jeffrey Pfeffer in one of their publication, "The External Control of Organizations : A Resource Dependence Perspective", is premised on three core hypothesis first is the indispensable role of resources towards the realization of a desired results, availability of required resources in an environment or other entities operating within the same environments as well as

the impact of dependency and power play in inter organizational relationship (Malatesta & Smith, 2014; Pfeffer & Salancik, 1978). Pfeffer & Salancik (1978) opined that organizations' external resources influence their conduct, and that's why it is critical for companies to shift, as well as negotiate with, their external environment in order to obtain access to the resources that they require to thrive. Resources in this context connote capital finding, assets, personnel expertise, and organization reputation, among other factors.

However, Hillman, Wither & Collins (2009) identified mergers/vertical integration, joint ventures and other inter-organizational relationships, boards of directorship, political action, executive succession as like methods through which firms can minimize environmental dependencies. To this effect, this has become a rationale for justifying in public-private partnerships, acquisitions or mergers, joint ventures, strategic alliances, supply sourcing, trade associations, board interlocks and equally indicate the significance project funding management, management techniques, strategic and tactical management, among others, as an integral part of an organization.

Manifestly, information communication technology, which has been underutilized within the sphere of Nigeria digital governance, as a result of due to several factors such as infrastructural deficit, issue of proficiency and lack of expertise among civil servants, digital illiteracy, misappropriation of funds, among. Based on these premises, ministries, departments or agencies of government on one hand and any non-governmental entities can enter into PPP arrangement.

Therefore, while relevant private sector takes advantage of government agencies legitimacy, viable capital sources, government institution will rely on topnotch expertise and efficiency techniques peculiar to private firm achieving its objectives. According to the National Information Technology Development Agency (2021) and Nigeria Communication Commission (2021) there are over four hundred and sixty-six (466) licensed information technology companies and one hundred and forty-six (146) telecommunication and internet service provider (ISP) companies in the country with expertise and specialized in this field. This however creates an enabling environment for government to partner with any of these companies to raise the standard of digital governance at a minimal cost with optimized cost benefits and efficient rate.

Contrarily the theory underplay the elitist tendencies and may want to key into the partnership to exploit the masses ; absence of a viable legal-institutional framework or regulatory agencies and ensure that the process of transfer; acquisition and running of the partnership conform with law of the country and global best practices ; corrupt practices on the part of bureaucrats and policy makers qui may want use the take the opportunity to misappropriate funds or amass public funds and others resources associated with this PPP arrangement for personal gains. Corroborating these aforementioned weaknesses, Hillman, Wither and Collins (2009) criticize the theory for a failure to distinguish between mutual dependency, power imbalances, and confused normative prescriptive character.

**Information Technology (IT) and Efficiency in Public Service Delivery: A Nexus**

Governments across all levels have a lot of services to offer to the citizens but are slow in technology adoption that will enhance citizen's access to public service delivery (Okonji, 2021), thus creating a wide access gap between the government and the people. This has in no small measure militated against the effective and efficient delivery of service that is crucial to the survival of the citizens. Prior, to technological innovation in public service delivery, the manual and or traditional means of public service bequeathed by the colonial masters in Nigeria were in place. Citizens in most cases engaged in a face-to-face encounter with the officials in public services either in government ministries, departments, or agencies. This, of course, makes the work slower and time-consuming in a country where 52.3% of the population lives in urban centers while 47.7% lives in rural areas (Kemp, 2021). The rationale behind the adoption of e-administration stems from the idea of globalization and a fast-changing political atmosphere where government needs to change its mode of interaction with its stakeholders and provision of essential services to the public. It is an integral part of New Public Management through its art of reforming operations of the public sector and its service delivery mechanisms (Abdulkareem & Ishola, 2016).

The introduction of IT to administration has brought a significant shift in paradigm from the traditional bureaucratic mode of operations to a modern and faster mode. This paradigm shift in public service delivery is shown in table 1 below:

**Table 1: Shift in Paradigm from Bureaucratic to E-administration through IT**

| S/No | Operation | Bureaucratic Paradigm | E-administration Paradigm |
|---|---|---|---|
| 1 | Orientation | Production cost-efficiency | User satisfaction and control flexibility |
| 2 | Process organization | Functional rationality, departmentalization, a vertical hierarchy of control | Horizontal hierarchy, network organization, information sharing |
| 3 | Management principle | Management by rule and mandate | Flexible management, interdepartmental teamwork with central coordination |
| 4 | Leadership style | Command and control | Facilitation and coordination, innovative entrepreneurship |
| 5 | Internal communication | Top-down, hierarchical | Multidirectional network with central coordination, direct communication |
| 6 | External communication | Centralized, formal, limited channels | Formal and informal direct and fast feedback, multiple channels |
| 7 | Mode of service delivery | Documentary mode and interpersonal interaction | Electronic exchange, non - face-to-face interaction |
| 8 | Principles of service delivery | Standardization, impartiality, equality, and equity. | User customization, personalization |

**Source:** Ndou (2004), Abdulkareem & Ishola (2016)

The application of IT in the deployment of public services in Nigeria has been able to transform the efficiency, effectiveness, transparency, and accountability of the exchange of information and transaction; with the objective to provide a "SMARRT" administration. The acronym SMARRT refers to Simple, Moral, Accountable, Responsive, Responsible, and Transparent government *(*Ayo, 2014). The workload encountered in the traditional/manual operation has drastically reduced with the use of IT; this makes the work simple and less cumbersome. The moral aspect is seen in the fact that interaction is not between or among individuals but with information on the system through the internet (website).

Again, accountability and transparency in dealing with the public are enhanced with the use of IT. For instance, the Treasury Single Account (TSA) instituted by the Federal government, has in no small measure assisted the government and citizens from being shortchanged by public officials. This makes operations seamless and revenue remitted to the appropriate quarters. The era of governments agencies operating multiple bank accounts in generating and spending revenue through her income generating agencies such as the Nigerian National Petroleum Corporation (NNPC), Nigeria Immigration Service (NIS), Nigerian Customs Service (NCS), Federal Inland Revenue Service (FIRS), Nigerian Airport Authority (NAAC) and examination bodies such as Joint Admission and Matriculation Board (JAMB), and National Examination Council (NECO) among others, which provided an avenue for fraudulent practice (Ogunfadebo & Abiodun, 2021) came to a ceremonious end with the inception of TSA as accountability and transparency were assured.

From the foregoing, responsive and responsible administration in the public sector became evident. This is so because, with the use of IT, the hitherto bottle-neck encountered in public service is

ameliorated. Transactions are carried out from different parts of the country the same time with needed responses gotten whenever the citizens need same. For example, the internet is available round the clock and this makes access to information easier, thus, creating a twenty-four (24) hour service to the citizens who can access information and or transact business with government agencies any time of the day. The importance of IT to public service delivery through government MDAs cannot be overemphasized as states of the world (developed and some developing) are already benefiting immensely from the change from analog, manual, bureaucratic mode of operation to digital (electronic) mode. This, Nigeria government will also enjoy the full embracement of IT in her public service by deploying more needed infrastructural facilities to the sector. The 2021 Nigeria e-Government Summit, organized by DigiServe Networks Services, also, stressed the need for increased technology adoption in government service delivery that will make government services more accessible to citizens and boost revenue generation for the government (Okonji, 2021).

**Enhancing E-governance and E-administration through the Engagement of Other Sectors of the Society**

The shift in paradigm from bureaucratic mode of operation to electronic mode has made governance and administration in the public sector easier, more accessible, seamless and less cumbersome, and more responsive as well as cutting the cost and time of both government and the citizens. This came as a result of the innovations brought by IT into governance and administration. Though, this innovation plays important role in the public sector as earlier pointed out, as improves the quality of service delivery as well as reduces costs, more infrastructural deficit gaps still need to be filled and government alone cannot sufficiently solve them.

Thus, the need for collaboration between public and private entities through Public Private Partnership (PPP) to create better and more effective public services. This collaboration will enable the participants to exchange and share knowledge, experiences, know-how, and expertise (Stanka & Veronika, 2013). The technology know-how and expertise in the private sector that propel the quest for achievement, efficiency, and more profit at lower cost is also needed in the public sector. Though, not necessarily for more profits, but for more efficient and effective service delivery to the citizens. This collaboration will be with technology service providers, telecommunication companies, IT experts, religious bodies, and mass media as well as security agencies among others. This has further expatiated below;

**Partnership with Technology Service Providers**

One germane institution in the provision of technical service in public service is the technology service providers. These service providers offer technology services, often Software-as-a-Service (SAAS), to specific market segments or industries serving hundreds of thousands or even millions of customers per year. In Nigeria today, not less than twenty (20) technology service providers are in operation, some of which are Ziza Digital, Pink Orange, Fintech, Oaperg Technology, Anatech, OATs Technology Africa, CKDigital, WeStrat Digital and Netcat Technology Solutions Limited among others. These service providers carry out internal, shared, and external services for institutions. A robust partnership with technology service providers will enhance the e-service in public administration and governance. An instance is a partnership between Oaperg, a leading global technology services company and Paymish, a Central Bank of Nigeria licensed payment servicing company (News Desk, 2022) for better services in the financial market.

**Partnership with Telecommunication Companies**

Shortly into the fourth republic in 1999, President Olusegun Obasanjo's administration privatized the telecommunication sector which opened up the sector for private (foreign and local) investors to take over this sector. Today, telecommunication impacts widely felt in the country with MTN, Globalcom, and Airtel being the leading telecommunication companies in the country having 38

percent, 27 percent and 26 percent respectively of the market shares (Onukwe, 2022). The wide coverage of these telecom companies will assist in circulating information about government policies, administration, and services to the public as seen during the COVID-19 restriction period in 2020.

The Association of Telecommunications Companies of Nigeria (ATCON) president Ikechukwu Nnamani at the national stakeholder's summit on protecting the integrity of Nigeria's critical infrastructure monuments and business assets held in Abuja, called on the imperative need for partnership between the sector and government at all levels in Nigeria. He posited that d Critical National Assets and Infrastructure (CNAI) are services and systems that support the economic, political, and social life of a nation. He then further added that…

> They cut across every sector necessary to maintain normalcy in daily life, adding that the sectors include ICT, energy, financial, commercial facilities, critical manufacturing, dams, emergency services, food and agriculture, chemicals supply, government facilities, healthcare, transportation, water supply, waste management, and education facilities, amongst others (Adepetun, 2022)

Thus, a partner with this sector of society will go a long way in enhancing the level of public service delivery by the government's MDAs as information on government activities is shared with the citizens through their mobile phones.

## Challenges Associated with the Effective Adoption and Implementation of E-administration in Nigeria's Public Sector

The submissions made in the previous section of the study revealed that there is a nexus between digital platforms and organizational practices in contemporary administrative systems. In light of this, several literatures unequivocally corroborate the supposition that the adoption of e-governance will improve the delivery of Nigeria's public institutions in their engagement with citizens, businesses, and intergovernmental agencies in the course of their routine activities (Dode, 2007; Ajibade, Ibietan & Ayelabola, 2017; Obi, Uzor & Chukwurah, 2020; Okonj, 2021). However, several challenges, such as the digital divide, infrastructural deficit, porosity of cyber security, architecture, lack of a viable database, poor maintenance of existing facilities, and digital illiteracy, are potential threats that impede the efficacy of this innovation (Abasilim & Edet, 2015; Onyemali, 2018).

In terms of internet usage, there is a certain degree of inequality among different states of the Federation. A recent study revealed that there is a higher concentration of internet users in Lagos, Oyo, Ogun, Kaduna, Kano, and Abuja, compared to the population of internet users in Ekiti, Ebonyi, and Bayelsa State (Adeleke, 2022). Similarly, about 52.3% of Nigerians reside in the urban area, while others are domicile in the rural area. This implies that about 47.7% citizen will be exempted from accessing the E-Administration platform as a result of the infrastructural deficit in rural areas (Kemp, 2021). Corroborating this position, the low level of ICT adoption and usage in less developed cities to a lack of information and communication technology infrastructure, high deployment costs, and erratic electricity supply (Sami, 2021). Recently, the Nigerian Communications Commission revealed that approximately 35 million Nigerians are unable to access telecoms and digital services and fiber network infrastructure (Elebeke, 2022). These disparities coupled with the poor maintenance of the existing Infrastructural will however affect the adoption and efficacy of unified digital administrative platforms across federal ministries, departments, and agencies across the country.

Up-to-date proficiency and discoveries in information communication technologies coupled with the porosity of cyberspace, have become a nightmare associated with the adoption of e-administration in most third-world nations. More often than not, several governmental institutions have suffered a series of cyber-attacks at the hands of hackers and cyber activists within and outside the country. Corroborating this position, Table 2.0 illustrates the spate of cyber-attacks on Ministries, Department, and Agencies of the Nigerian Federal Government between 2011 and 2022.

**Table 2: Selected Issues of Government's MDAs Hacked (2011-2021)**

| S/No. | MDAs hacked | Year | Description |
|---|---|---|---|
| 1 | NDDC and NAPEP website | 2011 | To protest against the $6 million budget for the upcoming presidential inauguration of President Goodluck Jonathan. |
| 2 | Economic and Financial Crime Commission (EFCC) | 2011 | Website hacked to fight against strict Internet censorship imposed by the Nigerian government |
| 3 | Nigerian Army Education Corps (NAEC) | 2012 | In protest against the incessant harassment of innocent protesters instead of fighting book haram insurgency |
| 4 | National Primary Healthcare Development Agency (NPHCDA) | 2012 | The hackers defaced all the pages of the website except the home page, with inscriptions left on the website including "*Your security was zero. That is why you got owned.*" |
| 5 | Nigeria Security and Civil Defense Corps (NSCDC) | 2013 | Adeniji Lukman, 23 years old web design expert, hacked into the Web sites of Nigerian government agencies |
| 6 | States Security Service (SSS), | 2013 | |
| 7 | National Examination Council (NECO), | 2013 | Adeniji Lukman, 23 years old web design expert, hacked into NECO's websites and got questions and answers for exam ca ndidates at different prices |
| 8 | Nigeria Customs Service (NCS) | 2013 | |
| 9 | Central Bank of Nigeria (CBN) | 2020 | #Endsars protest against the security operatives |
| 10 | Nigerian Broadcasting Commission (NBC) | 2020 | The hacke rs put up a message threatening to reveal secrets of Nigerian authorities |
| 11 | Ministry of Information and Culture | 2021 | In protest against prolonged Twitter ban in Nigeria by the Federal government. |

**Sources:** Sahara Reporters (2011); Kumar (2012); Goldman (2013); Odunsi (2020); and Nwachukwu (2021).

Thus, the spate of hacking of strategic agencies of government website exemplifies the proportion of cyber insecurity in the country and this could also hamper the virtual administrative system in Nigeria.

More so, data management trajectories are another impediment associated with the use of e-platforms for enhancing service delivery. Ploeg, Moffitt & Citro (2002) and National Research Council (2001) posit that the success of social welfare programs in Western countries, developed economies, and welfarist states such as the United States of America, Canada, and Australia hinged on the availability of sufficient and reliable data and the extent to which they are properly managed by relevant authorities. In contrast, most African countries are still struggling to establish a data-driven administrative system in the twenty-first century, the manifestation of this was the inability of the Nigerian government in reaching out to citizens in need of palliative relief, among other preventive measures (Olubiyi, 2021).

Put differently, the digital illiteracy of the citizens, who happens to be prospective end users of E-administration platforms in the country. Even though Nigeria's literacy rate has considerably increased from 51.08% in 2008, to 62.02% in 2018, about 50% of the country's population according to World Development Reports still lacks digital skills (Onyedinefu, 2022). Corroborating this position, the National Bureau of Statistics, 95% of Nigerians do not own a computer (PC). This has a significantly most civil or public servants and citizens who happen to be end users to effectively transact using digital platforms.

**Conclusion and Recommendations**

The study concludes that the public sector in Nigeria has not effectively taken advantage of e-administration which has become a potent tool for facilitating public service delivery, and other governmental engagement with the citizens in the 21st Century. The study discovered that various challenges such as the digital divide, infrastructural deficit, poor maintenance culture, digital illiteracy and porosity of the cyber security architecture hinder the efficacy of the e-administration. Concurrently, the study revealed that huge security spending, stunted economic growth, huge debt profile, poor internally generated revenue, and much involvement of government in other sectors of the economy are some of the reasons responsible for the infrastructural gap. Thus, the study maintained that private intervention through a public-private partnership with ease the burden of government in terms of physical infrastructure and this will consequently enhance the efficacy of e-administration. Therefore, the paper recommends Collaboration between National Commission for Mass Literacy Adult and Non-Formal Education (NMEC), National Information Technology Development Agency (NITDA), religious organizations, professional unions, trade union associations, and other strategic non-governmental organizations towards facilitating adult literacy classes for their members.

Government as a matter of priority should put in place policies and a conducive milieu for public officials (civil and public servants) to be internet compliant. This will be done through training and retraining of staff. Thus, special funds should be budgeted annually for this purpose.

Deployment of intern students and National Youth Service Corps (NYSC) members in disciplines related to telecommunication technology, computer science, computer technology, data science, statistics mathematics, among others to government departments, ministries, and agencies to facilitate proficient navigation of digital, computerized and ICT related gadgets to ensuring service delivery. This will also serve as a framework for ushering a competent and diligent computer-driven generations into the Nigerian civil service.

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