ANALYSIS OF THE CHALLENGES OF DEVELOPMENT ADMINISTRATION AND E-GOVERNANCE IN NIGERIA: THE EXPERIENCE IN DELTA STATE

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Abstract

This paper examines the challenges of development administration and information technology in enhancing service delivery between government and the citizens in Delta State of Nigeria. It argues that while the adoption of information communication has been recommended to be one of the major mechanisms for solving bureaucratic inefficiency, corruption, lack of accountability, and poor communication between the government and its' citizens, some states in the Nigeria has not adopted this major source of enhancing government performance. The paper utilized questionnaires and focus group meetings research methods to derive its data. The population of the research was 6,742 civil servants in the Delta State of Nigeria government. Data collected were analyzed by using qualitative and quantitative methods. This was done thematically by explaining conceptual issues and the association among variables. The finding reveals that there is a positive correlation between information technology and development administration in the public service sector of Delta State Government in Nigeria. This paper also provides recommendations on the need to appropriate funding and policy changes to enhance the use of modern information technology to galvanize development administration. This is because the adoption of appropriate initiatives could propel more effective communication between government and citizens, and on the one hand, between the public and private sector in Delta State and beyond.

Key words: *Public Infrastructure Project, Information Technology; Development Administration; Public Service Efficiency.*

Introduction

The adoption of information technology to enhance good infrastructure and public service delivery has been the cause of disagreement for the past decade in Nigeria. Many scholars contend that information technology could enhance the performance of government in areas such as fast delivery of services, public participation, tax evasion, biometric data, such as fingerprints and facial recognition (Abdulkareem. 2024; Nwafor et al. 2024; Tremblay-Cantin et al. 2023). Other benefits of the used of information technology include exposed hidden bank accounts used, bridging the communication gap between the government of Nigeria and its citizens Obara & Dibie 2024; Nwafo et

al. 2024; Tremblay-Cantin et al. 2023). According to Afieroho et al. 2023; Obara & Dibie 2024; Okocha et al. 2024). Other scholars have also argued that apart from enhancing development administration, information technology could boast the empowerment of public administrators, encourage greater transparency, and enhance public service delivery to sustained level as well as improve the quality of life of citizens (Okocha et al. 2024; Oloyede 2024)

In the past two decades the trend in technology usage to the public and private sectors has increased tremendously. While the private sector has adopted many forms of innovative technology to enhance the production of goods and services, the public sector has been engulfed in their traditional bureaucratic procedures (Abdulkareem. 2024; Obara & Dibie 2024; Pshenichnikova 2023). Further, as result of obsolete bureaucratic procedures my scholars have argued that the government has not been efficient in the delivery of goods and services (Jaiyeola & Musumhi 2023; Guenduez, & Mettler 2023; Obara & Dibie 2024). The characteristics of efficiency in service delivery in even worse in many developing countries around the world. In Nigeria, many scholars argued that government officials often lack appropriate understanding of the application of emerging technologies to galvanize efficiency (Abdulkareem. 2024; Tremblay-Cantin et al. 2023). While some state governments' ministries and agencies have attempted to enhance technical agility, security, consumer experiences and agility, they have faced numerous challenges that are related to electricity supply; trust, low budget, ignorance, lack of political will, and skepticism about citizens' expectations (Obara & Dibie 2024; Guenduez, & Mettler 2023).

In addition, the use of information technology to enhance speedy and effective governance has been argued as a modern mechanism for fostering and developing excellent customer service and promoting value driven public goods and services (Abdulkareem. 2024; Guenduez & Mettler, 2023). Other scholars contend that the establishment of good governance practices becomes paramount in driving development administration and fostering the creation of value-driven public and private sectors (Dibie & Quadri 2018; Wadzani et al. 2021). This is because previous government practices heavily depended on human intervention and unprofessional acumen (Chui et al. 2023; Okocha, et al. 2024). This dilemma often led to deliberate unethical behavior delay, inefficiency, and corruption. Unfortunately, unethical behavior of civil servants often led to prohibitive cost of governance (Obara & Dibie 2024; Pshenichnikova 2023. Misappropriation of resources, perpetual poverty, and inability to attain sustainable development in Nigeria as also associated with unethical political behavior of leaders in the country (Abdulkareem 2024; Guenduez, & Mettler 2023; Nwafo et al. 2024).

In addition, the adoption of biometric verification number (BVN) has become a new mechanism for identification number assigned to individuals in Nigeria based on their fingerprints and facial recognition (Jaiyeola & Musumhi 2023; Nwokwu 2019). Further, the use of BVN has exposed hidden bank accounts used for tax evasion, money laundering, and concealing illicit wealth (Dibie & Quadri 2018; Guenduez, & Mettler 2023; Jaiyeola & Musumhi 2023). The biometric verification number process as also revealed how information technology continue to played a crucial role in curbing corruption (Ghosh 2021; Jaiyeola & Musumhi 2023). The new digitalization processes through initiatives like integrated personal payroll information system (IPPIS) and BVN has significantly reduced cases of ghost-workers and non-payment of pensions (Dibie & Quadri 2019; Okocha, et al. 2024). Furthermore, the use of added information technology in governance has facilitated transparency in monetary management, taxation, and licensing, allowing stakeholders to access financial and non-financial information (Afieroho et al. 2023; Wadzani et al. 2021)

Other scholars have also argued that latest information technology has bridged the information gap between the government and citizens (Eweoya 2021; Nwafor et al. 2024). In addition, the use of information technology has also facilitated consultations, allowing citizens to actively participate in policymaking and ensuring effective implementation. Initiatives such as service compact (SERVICOM) have been used to track service delivery in various government agencies and gather feedback from the public, ensuring accountability and continuous improvement. However, corruption has not made the initiative to be remarkably successful in some states in Nigeria (Abdulkareem. 2024; Nwafor et al. 2024). In Nigeria like many other African countries all government agencies now have websites and social media platforms, which enhance effective communication between government and citizens as well as public and private sectors (Afieroho et al. 2023; Eweoya 2021; Fang 2013).

The Integrated Personnel and Payroll Information System has also. helps some public and private sectors to provide a centralized database of government employees with biometric verification (Afieroho et al. 2023; Fang 2013; Nwafoe et al. 2024). These technology mechanism could be used to verify the identity of each employee, as well as identify and remove ghost workers from the payroll, reducing the opportunity for corruption and saving significant public funds (Obara & Dibie 2024; Okocha, et al. 2024). Another especially important advantage of using information technology is to enhance monetary management, budgeting, and reporting (Abdulkareem. 2024). The use of technology could also foster an effective centralized platform for managing procurement activities, promote fair competition, reduce the risk of corruption in the procurement process, and ensure better value for public funds. Information technology has also been reported to effectively enhance transparency in vendor selection, bidding processes, and contract management (Pshenichnikova 2023).

Rapid advances in technology are transforming the workplace and changing the way public administrators learn by impacting the interpersonal communication and collaboration among employees. Many ministries in the Delta State Government are now implementing different e-Governance practices into the way they conduct their functions, using these tools to increase service delivery (Nwafor et al. 2024). Such e-Governance practices in Delta state entails biometrics data capturing which involves bank verification number (BVN) linked to employee payroll system, Fingerprint-scan, Facial-scan, and Signature-scan (Obara & Dibie 2024; Nwokwu 2019). The goal is to curb fraud and as well improved attitude, behavior towards work on the assumption that it helps to check absenteeism, lateness, ghost workers' syndrome through the biometric/electronic clock-in and clock-out which in turn results in service delivery as these employees were employed to deliver certain services (Obara & Dibie, 2024). Other practices involve Online Services (Online application of Jobs to the civil service, online application and payment of taxes, online registration/renewal of cars licenses and online application for entry/promotion exams), Official website for information, Official email addresses, Official WhatsApp group platforms and e-Governance infrastructure (Wi-Fi/WLAN), wireless modem, official desktop/laptop computer, power supply (Nwafor et al. 2014). Therefore, this paper focuses on the effect of different components of information technology practices that could be used to enhance the quality-of-service deliveries in the Delta State Civil Service (Chiamogu & Onu 2012; Obara & Dibie 2024; World Bank 2000).

What is missing in the literature of Information Technology in Nigeria is that despite several studies on the adoption of Information communication Technology and practices in different fields, very few research has examined the application of e-government tools and practices to government-public engagement in project management particularly, public participation to monitor performance execution in Nigeria. This paper attempts to fill the gap in the literature in technology and development administration in Africa. This paper also provides a more vivid connection between information communication technology and development administration in the Delta State Government of Nigeria. Further, unlike existing literature this paper also connects development administration principles as a basis for introducing latest information technology initiatives that Ministries and Government Agencies could adopted to enhance or prioritized the use to galvanized service delivery, drive transparency, accountability, and good governance in Nigeria as well as Delta State**.**

The research aimed at drawing government's attention to the challenges posed by connecting development administration with performance management and information communication. Connecting data management, identification, and

biometrics, as well as digitalization of school education could in all ramifications propel the processes of development administration outcomes more efficiency in Delta State. The recommendations emanating from the research work serve as a guide to accomplishing good governance. This is because governance should entail empowering citizens to hold government accountable through participation and decentralization, using technology to enforce compliance with the role of law and greater transparency. Thus, enabling government to use information technology to respond to new demands by building capacity is especially important mechanism for development administration.

Review of Related Literature

Information Technology and Development Administration Framework

In the past two decades many countries in Africa have used information technology to redesign their public services and process of performance management. This means that not only is information technology one of the crucial touch point but also the primary mechanism that governments communicate with residents as well as enhance their development administration goals (Dibie 2025; Obara & Dibie 2024; Okocha et al. 2024). Some scholars contend that the essence of e-governance is the communication between the 'governing and the governed' and the test of 'good Governance' in a harmoniously living society and advance economic development (Abdulkareem 2024; Okocha, et al. 2024; Oloyede 2024; Tiika et al. 2024). From meetings and discussions with Organization for Economic Co-operation and Development (OECD) countries in 2003 and 2004, it is clear that the implementation of ICT techniques and particularly using the Internet as a delivery channel for services should become an important means for changing what government does and how it does it. OECD countries have identified five areas for achieving better government with the help of these new tools (European Commission 2003; OECD, 2005; World Bank 2000). The following factors are mechanisms that guide the conceptual framework of information technology and good governance models discussed in this paper.

a. User-Focused e-Governance**:** making electronic services more responsive to the needs of citizens and businesses.
b. Multi-Channel Service Delivery**:** improving links between traditional and electronic services in order to promote service innovation and ensure access for all users.
c. Approaches to Common Business Processes**:** identifying common processes within government in order to achieve economies of scale reduce duplication and provide seamless services.
d. The Business Case for e-Governance**:** measuring and demonstrating the costs and benefits of ICT investments in order to prioritize and better manage e-Governance projects.
e. E-Governance Co-Ordination**:** Linking government's perspective to e-Governance initiatives and their management, while considering existing structures and cultures

of government institutions.

f. Electricity Supply**:** meaning improving the methods for generating constant electricity to run technology equipment (Dibie, 2014; Chakrabarty & Kandpal 2020; Kraft & Furlong 2024; World Bank 2000). Figure 1 is used to explain the relationship between information technology and development administration.

Figure 1: Connecting Information Technology and Communication Goals and Development Administration.

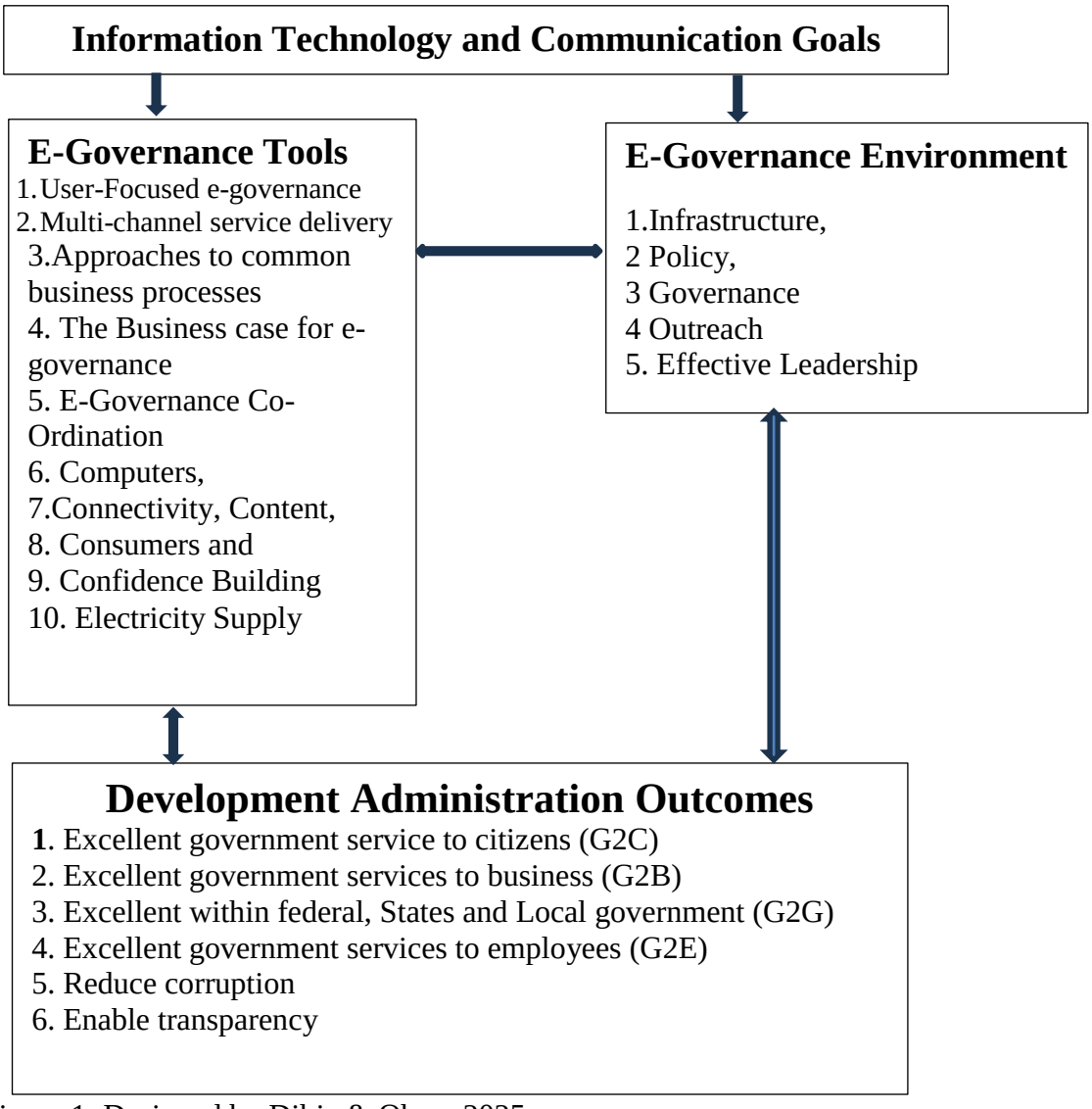

Figure 1: Designed by Dibie & Obara 2025

Figure 1: shows the relationship between development administration, Information technology and communication goals, and e-governance tools and e-governance environment. The figure also illustrates how development administration program needs to be win-win in all ramifications. This is because the mechanisms of development entails management and distribution of economic resources, as well as contributing to a highly performing government. According to Dibie 2025, an effective performing representative government must empower citizens to hold government accountable. Thus, development administration efforts should galvanize government or respond to new economic and technology demands, as well as enforce compliance with the economic and political rules mandated by shared governance and the mandates of the constitution.

One of the major adopt objectives of development administration is to use effective administrative mechanisms such as technology to facilitate and stimulate planned social and economic progress through the implementation of policies, programs, and projects designed to accomplish national development goals (Abdulkareemet et al. 2023; African Development Bank 2021; Dibie 2025). The use of ICTs can connect all three parties and support processes and activities. In other words, information communication technology uses electronic means to support and stimulate good governance (Chui et al. 2023. Therefore, the objectives of development administration and information technology are similar to the mechanisms of facilitating good governance. Good governance can be seen as an exercise of economic, political, and administrative authority to better manage affairs of a country at all levels. It is useful here to present objectives for achieving development administration, democracy, and effective public policy implementation (Alidu 2023; Boboye 2017; Kraft & Furlong 2024; Nwafor et al. 2024; Schuppan, 2009).

Finally, the infrastructure dimension also extends to the energy sector, as access to electricity is a precondition for a functioning ICT infrastructure. A policy is a deliberate plan of action to guide decisions and achieve rational outcomes. Commonly, governments develop and implement policies to address basic socio-economic issues that are expressed in laws, budgetary actions, international agreements, declarations, contracts, or campaigns. Diverse types of policies shape the e-Governance environment. Trade regulations control the import and export of ICT goods, affecting the provision of services. Policies protecting local ICT industries, including tariff barriers, alter the movement and price of goods in a market. Similarly, antitrust regulations and market liberalization strategies, enforced by telecommunication regulatory authorities, have created the conditions for greater competition in the sector, the introduction of modern technologies and services, and better prices for consumers. Likewise, the inclusion of universal service obligations in the licenses of

telecommunication incumbents or Internet providers has promoted access to ICT infrastructure in least served areas, such as rural and low-income communities (European Commission 2003; Ministry of Communications and Information Technology of Nigeria 2022). However, the information technology initiative project in Nigeria is still facing from lack of sufficient or irregular electricity supply (Abdulkareem 2024; Nwafor et a. 2024; OECD 2005).

The preferred form of development administration is one that is accessible, transparent, and accountable, and where the citizens are consumers (Dibie 2025; Chakrabarty & Kandpal 2020. Achieving better or effective government will require both a better understanding of what governments hope to achieve and indicators to see if they are on the right path (Kraft & Furlong 2024). It is imperative to look at the use of business cases for information technology to demonstrate the risks and expected returns on ICT investment, in terms both of savings to government and benefits to citizens and the private sector. Analysis of information technology and benefits allows governments to support investment decisions and evaluate results. Without a business case, governments risk developing technology-enabled services that may not correspond to the needs of citizens and businesses. Thus, information technology embodies the vision of a whole of government logic that transcends sectoral interests in favor of more fluid and seamless relations within the public sector (Dibie 2025; Kraft & Furlong 2024; OECD 2005; World Bank 2000). Thus, deconcentrated service delivery through partnership with federal, state, local governments, and local communities supported by capacity building could enhance effective governance as well as transparency and empowered recipients (Chukwuemeka 2017; Chui et. al. 2023; Dibie, 2025).

Methodology

The objective of this paper is to examines the nature of the use of information technology to enhance development administration in service delivery between government and the citizens in Delta State of Nigeria. The data was derived between 2020 and 2024 through the administration of questionnaire and conducting focus group meeting research methods. The population of the research was the 6,742 civil servants in the Delta State Government of Nigeria. Fifty-five percent (55%) of the respondents were men, while 45% were women staff of the Delta State Government. Data collected were analyzed by using thematically oriented methods to explain conceptual issues and association among variables. The major research question is: How has the adoption of information technology identification and biometrics through Fingerprint, Facial and Signature scan resulted in improved development administration and performance in service delivery in the Delta State Civil Service? The major Hypothesis is the availability of Wi-Fi/WLAN, wireless modem, official desktop/laptop computers, power supply, electronic clock-in machines, point of sales machine, zoom, WhatsApp

and emails, to educate and improve everyday work has no significant contribution to service delivery in Delta State civil service.

This research was chosen because information technology serves as an alternative means of providing public services rather than providing services the obsolete bureaucratic practice, this tries to defer the status quo. The researcher has deemed it very imperative to focus on the way information technology has galvanized development administration and service delivery in Delta State civil service. It should be noted that government is the institution through which laws or decisions are formulated. In addition, the civil service is the major mechanism that propels the implementation of all public policies. The limitation of the study is that it only covers the use of latest information technology and development administration issues in the Delta State of Nigeria (David et al. 2022; Dibie 2018; Obara & Dibie 2024;).

Analysis and Discussion

The data obtained from the research are presented below under consecutive headings in relation to the hypotheses. This research explores Nwana (1981) multiple sample sampling techniques to get a sample of the key informants from the total population 6742. The Nwana sampling technique suggests that if the population is a few hundreds, a 40% or more sample suffices; if many hundreds, a 20% sample will do; if a few thousands, a 10% sample will do; and if several thousands, a 5% or less sample will be representative of the population. Thus, we applied 2% to the entire population of 6,742 since the sampling technique suggests 5% or less if the population is several thousand: i.e.

$$\frac{6742}{100} \times \frac{2}{1}$$

$$= 134$$

To this end, 134 key informants form the sample size of this research. Furthermore, we purposively selected eleven (11) ministries where we have serious e-governance presence using purposive sampling technique. Again, to get the sample size for each of the ministries under research, we used the Kumars (2024) proportionate formula. Thus, according to Kumar (2014) proportionate formula, the actual number of key informants per ministry are as follows.

$$nh = \frac{n(Nh)}{N}$$

Where nh is the sample size of each of the ministries.
n=Total sample size
Nh= Population of each ministry,

N=Total population

Further, a simple random sampling method to select the key informants in each of the ministries. Table 1 shows the sample size distribution.

Table 1: Sample Size Distribution

No	Ministries	Population	Percentage (%)	Sample Size Distribution
1	Ministry of Commerce and Industry	**415**	6.1%	8
2	Ministry of Economic Planning	**398**	5.9%	8
3	Ministry of Energy	**506**	7.5%	10
4	Ministry of Environment	**203**	3.0%	4
5	Ministry of Finance	**381**	5.6%	8
6	Ministry of Health	**1035**	15.3%	21
7	Ministry of Education	**1276**	18.9%	25
8	Ministry of Information	**759**	11.2%	15
9	Ministry of Lands Survey and Urban Development.	**723**	10.7%	14
10	Ministry of Science and Technology	**133**	1.9%	3
11	Ministry of Works	**913**	13.5%	18

Source*:* Derived from Survey, 2022-2024

Hypothesis 1: The adoption of biometric data through fingerprint, facial, signature scan, and electronic clock-in and clock-out has not positively affected service delivery in Delta State civil service.

Table 2: Respond Rate of Respondents to the Adoption Biometrics (ICT)

Option	**Frequency of Positive Responses**	**Frequency of Negative Responses**	**Total**	**Remark**
Do you think the introduction of biometrics in monitoring ghost workers is a good thing?	105 **(78.4%)**	29 **(21.6%)**	134 **100 %**	Positive
Data Management and Infrastructure have positively improved performance in my office.	126 **94%**	8 **(6%)**	134 **100%**	Positive
Identification and biometrics have helped my ministry to solve many unethical issues.	132 **(98.5%)**	2 **(1.5%)**	134 **100%**	Positive
E-Clock in and clock out has contributed more to service delivery in	131 **(97.8%)**	3 **(2.2%)**	134 **100**	Positive

the civil service?			**%**	
Biometrics presence has helped to reduce lateness and absenteeism in my ministry.	119 **(88.8)**	15 **(12.2%)**	134 **100 %**	Positive
The use of IT registry and portal solutions has solved many problems in my office.	134 **(100%)**	0 **(0%)**	134 100%	Positive
IT has enhanced career development and education in my ministry.	127 **(94.3%)**	7 **(5.7%)**	134 **100%**	Positive
The new IT national payment system has solved many unethical problems in my ministry.	117 **(87.3%)**	17 **(12.7%)**	134 **100%**	Positive
The new practice of capturing fingerprints helped in providing a reliable database in my ministry.	106 **(79.1%)**	28 **(20.9%)**	134 **100 %**	Positive

Source: Derived from Survey, 2022-2024

The analysis in Table 2 reveals that. 78.4% of the key informants in the interview and focus group discussion responded positively, and 21.6% responded negatively on the introduction of biometrics in monitoring ghost workers and how it has positively helped to improve quality service delivery. On one hand, 94% of the respondents indicated that electronic data management and other information technology mechanisms have positively improved performance in their office. On the other hand, 98.5% of respondents of the questionnaire indicated that identification and biometrics have helped their office to solve many unethical issues in their Ministry, respectively. Ninety-seven (97.8%) of the key respondents responded positively and 2.2% responded negatively on how e-Clock in and clock out contributed to more service delivery in the civil service. Further, 88.8% of the key informants responded positively and 12.2% responded negatively on how have biometrics presence in the Delta state civil service helped to reduce lateness and absenteeism to foster effective services.

While 100% of the questionnaire respondents indicated that the use of information technology registry has positively solved many problems, 94.3% of the group members acknowledge that the new practice of biometrics practices such as fingerprints has enhanced the Ministry or Public Agency in providing a reliable data based. Further, 87.3% of the respondents also confirmed that the latest information technology payment system has solved many unethical payment in their Ministry. It should be noted however that 12.7% of the respondents indicated that there has not been any reasonable improvement in the payment system in their Public Agency. In addition, 79.1% of the key informants responded positively and 20.9% responded negatively that the presence of biometrics practice through capturing of fingerprints helped in providing a reliable data base of existing public officers in the state civil service.

Considering majority Percentage (%) of positive responses of the key responses from respondents.

Table 2 analysis confirms that the adoption of information technology mechanisms such as biometric data tracking through Fingerprint, Facial, Signature scan, and Electronic Clock-in and clock-out resulted in efficient service delivery in Delta State civil service has positively improved development administration in their Ministry and Public Agency, respectively. Thus, hypothesis 1 is which stipulated that "the adoption of biometric data through fingerprint, facial, signature scan, and electronic clock-in and clock-out has not positively affect service delivery in Delta State civil service is refuted.

Nine-nine (985) of the focus group meeting respondents suffice that; the introduction of biometrics has positively helped to large extent to fetch out ghost workers and had as well truly trimmed the state work force for the better and improved quality service. Again, the director in the accountant general office in the state during the focus group meeting told the researchers that the biometrics processing mechanism that was newly introduced few years ago has helped tremendously in fishing out ghost workers. He also confirmed that there were instances where staff travel overseas, and others absent from duty in the past, but their attendance was not documented. However, the introduction of information technology has helped to improve quality services, attendance, and accountability in the state government. The information technology mechanism has also helped in reducing or eradicating the fraud associated with the ghost workers' syndrome, thereby reducing the wage bill of government which was unduly bloated by the ghost worker's fraud. It was equally added that the introduction of biometrics has improved the integrity of payroll data and minimized the ghost workers' syndrome in knowing who a staff is.

In addition, 92% of the focus groups' respondents affirmed that the introduction of biometrics has assisted the government a great deal. Firstly, it has served as a psychological check against intending deviant employees or prospective abusers of government system. Furthermore, it helps to rid the government record system of multiple entries/duplicity of records, etc. and this helped to ensure high control and integrity of staff data fishing out timely of any data/system breach. On a final note, as expected, identification of staff with biometrics features eliminates possibilities of ghost staff. Other advantages include checking unwarranted absenteeism, research leave without approval, early closure etc., as these staff have services to deliver and their absence from work definitely affects service delivery.

Finally, both the questionnaire and focus group respondents confirmed the adoption of new information technology in their Ministry or Public Agency have helped in

providing a reliable data base as data can now be maintained across strata in such a manner that alternations cannot be carried out effectively across all ends of storage or usage of data without an elaborate and effective collusion of parties to the management of data. It has improved reliability of public office holders' data in the service. It is added that the unique computer number given to every employee, the biometrics processing of fingerprint makes every staff identifiable in places of restricted entry as well as easy search of personal data of every staff.

Conclusion

The paper has examined the nature of development administration and the use of information technology in service delivery between government and the citizens, as well as public and the private sectors in Delta State of Nigeria. It also investigated how the availability of e-governance infrastructures has facilitated more efficient service delivery performance in the Delta State civil service as well. This research ascertained how the adoption of biometric data capturing resulted in efficient service delivery in the state. In addition, it also established the degree in which the adoption of information technology mechanisms has stimulate and facilitate defined programs for social and economic mobility or enhance development administration in the implementation of public policies in Delta State of Nigeria.

The data analysis reveals that the Delta State government has made remarkable efforts towards developing an information technology infrastructure through which the state can be mainstreamed into the information society. However, there is still a lot to be done in the state to accomplish a much better development administration standard. This is because electricity and other information technology equipment are not yet available or in constant supply. Further, most staff in the various government agencies within the state government do not have modern information technology equipment or lack the training to effectively do the job, respectively. The research also reveals that using official technology equipment to perform their jobs, most government officials use their cellphones to communicate with vendors and citizens, respectively. Thus, it is often exceedingly difficult to track the exchange of information and level of accountability or standard operating procedures as well as compliance with public policy within the Delta State government.

The questionnaire and focus group meeting conducted also reveals that many state employees who have not been effectively trained on how to use information technology equipment to do their job feel that the introduction of information technology practices into the Delta State civil service was a thing of major concern as e-governance has come to replace them in their jobs. The younger employes or respondents feel that the introduction of information technology by the government administration is a good thing. This is because Delta State Civil Service has developed transformational

initiatives that focused on the use of modern information technology infrastructure such as biometrics data processing and online services for wider reach. Today, most of the staff pride as being conversant with the use of Information and communication technology (ICT).

Therefore, it could be argued that the adoption of development administration with information technology in the Delta State civil service has been an interesting one. However, the process has also been confronted with many challenges. These predicaments have delayed the availability of better and faster performance as well as delaying the facilitation of more efficient service delivery in the state civil service. There is therefore the need to enhance the adoption of biometric data usage in the state to enhance a more efficient service delivery. This research also reveals that the adoption of information technology has also provided a more comprehensive online services as well as assisted employees in Delta State Civil Service to provide services to wider range of citizens around the state as well as national and international levels. However, the set goals of achieving higher levels of proving information technology education for state employees has not been met. It is recommended that the Government of Delta State of Nigeria should adopt measures to facilitate better use of information technology to facilitate the hiring and training processes of staff. This is because latest information technology attracts talents, accelerates hiring processes, modernizes work processes, as well as invest more in skill development and career growth.

Finally, Delta State like many other states in Nigeria continue to have its share of predicaments mostly due to unethical politics and mediocre leadership who do not have the political will to accomplish development administration. It should be realized that a good life constitutes the foundation where productive nation or state such as Delta State of Nigeria could emerge and where people are allowed to tap into their creative energies and then help their state to move forward with issues associated with development administration.

References

Afieroho P, Perkins R, Zhou XT, Hoanca B, Protasel G. (2023). Adopting e-government to monitor public infrastructure projects execution in Nigeria: The public perspective. Heliyon.9(8): e18552. Doi: 10.1016/j.heliyon. 2023.e18552. PMID: 37576191; PMCID: PMC10413007.

Abdulkareem, A. K. (2024). E-Government in Nigeria: Can Generative AI Serve as a Tool for Civic Engagement? *Public Governance, Administration and Finances Law Review*, *9*(1), 75–90. https://doi.org/10.53116/pgaflr.7068

Abdulkareem, A. K., Ishola, A. A., & Abdulkareem, Z. J. (2023). E-Government and Bureaucratic Corruption in Nigeria: Successes and Challenges. *Journal Studing Pemerintahan, 12*(1), 1–20. https://doi.org/10.18196/jgp.121125

Abuali, A; Alawneh, A & Mohammad, H (2010). Factors and rules affecting e-government. *European Journal of Scientific Research, 39* (2) 169-175.

Afieroho P, Perkins R, Zhou XT, Hoanca B, Protasel G. (2023). Adopting e-government to monitor public infrastructure projects execution in Nigeria: The public perspective. Heliyon. 2023 Jul 23;9(8): e18552. doi: 10.1016/j.heliyon. 2023.e18552. PMID: 37576191; PMCID: PMC10413007.

African Development Bank (2021). African Development Bank's new economic governance strategy advocates bold public finance reform. https://www.afdb.org/en/news-and-events/press-releases/african-development-banks-new-economic-governance-strategy-advocates-bold-public-finance-reforms-44479. Accessed May 3, 2024.

Aginam, E. (September 25, 2016) *Delta State innovation hub: Okowa gets e-Government certification.*https://www.vanguardngr.com/2016/09/delta-state-innovation-hub-okowa-ets- e-Governance-certification/. Accessed May 13, 2024.

Alidu, S. (2023). Leadership, governance, and public policy in Africa. In: Aiyede, E.R., Muganda, B. (eds) Public Policy and Research in Africa. Palgrave Macmillan, Cham. https://doi.org/ 10.1007/978-3-030-99724-3_9. Accessed April 18, 2024.

Ambali, A. R. (2013). E-government in the public sector: Policy implications and

Boboye O., (2017). The role of information communication technology (ICT) in organization and human capital development: A research of tertiary education trust fund. *Nigeria Journal*

of Public Administration and Local Government, 19 (1) 1-18.

Chakrabarty B. and Kandpal P. C. (2020). Public Administration in a Globalizing World: Theories and Practices. Thousand Oaks: Sage Press**.**

Chiamogu A. P., Onu G. (2012). E-governance and public administration in Nigeria: A discourse. International Journal of Business and Management Tomorrow, 2(9): 1-9.

Chui**,** M., Hazan, E., Roberts, R., Singla, A. & Smaje, K. (2023, June 14). The Economic Potential of Generative AI. McKinsey Digital. Online: https://shorturl.at/lAIMT

Chukwuemeka, E.E; (2017). Effect of e-government on service delivery in federal university ndufu-alike ikwo, ebonyi state. *Review of Public Administration and Management, 5* (1). 2-8.

David, O. A., Onyepuemu, O. C., & Qazeem, I. B. (2022). E-Governance Response in

Tackling Covid-19 in Nigeria. *PERSPEKTIF*, *11*(3), 839–849. https://doi.org/ 10.31289/perspek tif. v11i3.7249. Accessed May 3, 2024.

Dibie R. (2025**).** Transforming Healthcare in Africa: A Comparative Analysis. London, United Kingdom: Anthem Press.

Dibie R. (2022). Health policy and administration in Nigeria: a critical analysis. The Journal of African Policy Studies, 28(1): 70-101.

Dibie, R. and Dibie J**. (**2021). "Public management and faith-based governance in Nigeria." Journal of the Management Sciences, Vol. 5(3), 1-24.

Dibie, R. (2018). *Business and government relations in Africa.* Taylor and Francis/Routledge Press.

Dibie, R.A & Quadri, M.O (2019). Reinventing e-governance policy in local governments in southern Nigeria. *The Journal of African Policy Studies*, *24* (1), 1-22.

Dibie, R.A & Quadri, M.O (2018). Analysis of the Effectiveness of E-Government in the Federal Government of Nigeria. *Journal of Public Administration and Governance*, *8* (3), 75-98.

Dibie, R. (2014). *Public administration: analysis, theories, and application*. Babcock University Press.

European Commission (2003). "*The Role of e-governance for Europe's future," communication from the commission to the council, the European parliament,* the European Economic and Social Committee and the Committee of the Regions, Brussels

Eweoya I., Okuboyejo S.R., Odetunmibi O.A., Odusote B.O. (2021). An empirical investigation of acceptance, adoption, and the use of e-agriculture in Nigeria. *Heliyon.* 2021;7(7) [PMC free article] [PubMed] [Google Scholar]

Fang Z (2013). *E-government in digital era: Concept, practice, and development*. Institute of Development Administration.

Federal Republic of Nigeria Federal Ministry of Communications, Innovation & Digital Economy. (2023). E-Government Initiatives. https://fmcide.gov.ng/initiative/e-government-initiative /. Accessed January 26, 2025.

Ghosh, L. K**.** (2021) Development administration in public administration. Journal of Emerging Technology and Innovation, 8(2), 1- 12.

Guenduez, A. A. & Mettler, T. (2023). Strategically Constructed Narratives on Artificial Intelligence: What Stories Are Told in Governmental Artificial Intelligence Policies? Government Information Quarterly, 40(1). Online: https://doi.org/10.1016 /j.giq.2022.101719.

Holfzer M., Schwester R. W. (2019). Public administration: an introduction. New York: Routledge/Taylor

and Francis.

Jaiyeola R. , Musumhi T. (2023). E-governance as an anti-corruption strategy: The Nigerian experience. https://www.ifac.org/knowledge-gateway/discussion/e-governance-anti-corruption-strategy-nigerian-experience. Accessed January 26, 2025.

Kraft M. E., Furlong S. R. (2024). Public Policy Analysis and Alternatives. Thousands Oak CA: CQ /Sage Press.

Kumar P, Lambert CG. (2024). Positive Unlabeled Learning Selected Not at Random (PULSNAR): class proportion estimation without the selected completely at random assumption. *PeerJ Computer Science* 10: e2451 https://doi.org/10.7717/peerj-cs.2451

Nwafor E. A., Afuecheta E. C., Umetiti E. B. (2024). Peris coping E-Governance in Nigeria: Matters Arising. https://www.ajol.info/index.php/ngjsd/article/view/266529. Accessed January 20, 2025.

Nwana, O. C. (1981). *Introduction to educational research;* Heineman Educational Books (Nig. Ltd.).

Nwokwu P. M. (2019). Problems and prospects of E-Governance in an Emerging State. The Nigerian example. Journal of Humanities and Social Science, 24(9): 14-21.

Obara O. O., Dibie R. (2024). Analysis of e-governance and performance Management in Delta State of Nigeria. Review of Public Administration and Management, 21(1): 1-20.

OECD (2005). E-Government for better government. Paris, France. OECD Publishing www. oecd.org/publishing/corrigenda. Accessed October 13, 2024.

Okocha, J., Adigwe, I., Bello, M., Ndunagu, J., Ayodele, A. (2024). A Comparison of E-government Services in Education Between Developed and Emerging Economies: A Study of Nigeria and the USA. In: Nagar, A.K., Jat, D.S., Mishra, D., Joshi, A. (eds) Intelligent Sustainable Systems. WorldS4 2023. Lecture Notes in Networks and Systems, vol 812. Springer, Singapore. https://doi.org/10.1007/978-981-99-8031-4_25.

Oloyede F. (2024). Electronic governance: Improving service delivery in Nigeria. PERSPEKTIF, 13 (2) (2024): 609-616. http://ojs.uma.ac.id/index.php/perspektif. Accessed December 20, 2024.

Pshenichnikova A. (2023). E-Government Development in Nigeria. https://we.hse.ru/en/irs/ cas/ passng. Accessed January 26. 2025

Schuppan, T. (2009). "E-Government in developing countries. Experiences from sub-Saharan Africa". In *Government Information Quarterly*, *26* (3),118-127.

Tiika B. J., Tang, Z. Azaare, J. Dagadu J. C. Otoo, S. N. A.(2024). Evaluating e-government development among Africa Union member states: an analysis of the impact of-government on public administration and governance in Ghana. Sustainability, 16(1):1333. .https://doi.org/10.3390/su16031333.Accessed November 3,2024

Tremblay-Cantin A., Mellouli S., Cheikh-Ammar M., Khechine H. (2023). E-Government service adoption by citizens: a literature review and a high-level model of influential factors. Digit. Govern.: Res. Pract. 2023 Apr 6;4(1):1–24.

Ukwuoma 1 H. C. Elisha N. C., Oye P. O. (2022). The role of e-Government in overcoming the consequences of the COVID-19 pandemic in Nigeria. Journal of Governance and Accountability Studies (JGAS).2(1):79-92

Wadzanai G. A., Bitrus J., Ogah U.S. (2021). ICTs as Catalyst for E-Governance Initiatives in Nigeria's Economic Transformation International Journal of Computer Applications. 183, 2 14-18. DOI=10.5120/ijca2021921292. Accessed January 5, 2025.

World Bank (2000). Can Africa Claim the 21st century? Washington, D.C: World Bank Publication.