E-Government: Planning and Strategic Model for Developing Economies

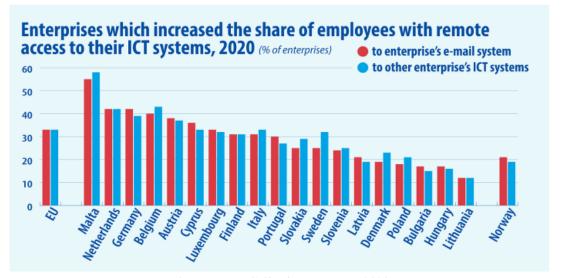
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Abstract:- This study explores the current state of egovernment planning and strategic models in Nigeria, identifying challenges and successful initiatives. Analysis of existing e-governance infrastructure, identification of key stakeholders, development of institutional and legal frameworks, and investment in human and financial resources are identified as essential elements for successful e-governance implementation. The proposed strategic model outlines steps for analysis, stakeholder planning identification, strategic goal implementation and evaluation, and promotion of citizen participation. The study highlights challenges such as limited access to internet and electricity, inadequate funding, and low citizen awareness and participation. Successful initiatives include the National Identity Management Commission's biometric identification system and Lagos State's online tax and permit platform. This study provides valuable insights for Nigeria's growing economy and its potential for enhancing government efficiency, accountability, and citizen participation through e-government.

Keywords: E-Government, Planning and Strategic Model, Nigeria, Economy

I. INTRODUCTION

With the rise of the internet and information communication technologies (ICT), e-government has become a growing field of study in the realm of e-businesses (Field, 2003). Through e-government, citizens can access government information and services more conveniently and at a lower cost, while government agencies can improve their efficiency and effectiveness (Yunis & Sun, 2009). The COVID-19 pandemic further highlighted the importance of e-government, as the world rapidly shifted to digital platforms for work, education, and commerce. E-government has also enabled public service organizations to perform their duties more effectively and efficiently, with 24/7 access to residents. Individuals can now communicate with government organizations online from anywhere and at any time.



Voluntary Data Collection (Eurostat, 2020)

E-government has become an expanding concept of governance and service delivery with capabilities to enhance public-sector services (Agangiba, 2013; Zhang et al., 2014; Estevez & Janowski, 2013), and transform the nature of public administration. E-government initiatives have been poised to have the potential to improve public service delivery (Cordella and Tempini 2015), increase efficiency, and reduce corruption in Nigeria's growing economy

(Asogwa, 2013). However, successful implementations require careful planning and a well-defined strategic model. Hence, the purpose of this study is to develop an egovernment planning and strategic model for Nigeria's growing economy.

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II. LITERATURE REVIEW

The concept of e-government has become increasingly popular in recent years, as governments worldwide have recognized the potential benefits of using information and communication technologies (ICTs) to enhance public service delivery and transform the nature of public administration. Several studies have been carried out to explore the factors that contribute to the success or failure of e-government initiatives in developing countries. According to West (2004), e-government is an expanding concept of governance and service delivery with the potential to transform the nature of public administration. E-government initiatives have been poised to have the potential to improve public service delivery, increase efficiency, and reduce corruption in Nigeria's growing economy (Asogwa, 2013). Mensah, (2019) conducted a study on e-government adoption in China and found that factors such as government support, infrastructure, and user trust were critical to the success of e-government initiatives. Cordella and Tempini (2015) also emphasized the importance of government support and stakeholder involvement in e-government planning and implementation.

Estevez and Janowski (2013) developed a framework for e-government implementation in developing countries, which emphasized the importance of stakeholder involvement, capacity building, and infrastructure development. The authors suggested that e-government initiatives should be developed through a participatory process that involves all relevant stakeholders, including government agencies, civil society organizations, and the private sector.

In the context of Nigeria, several studies have investigated the challenges and opportunities of e-government implementation. For example, Amagoh, (2016) conducted a study on the adoption of e-government in Nigeria and identified challenges such as inadequate infrastructure, low levels of computer literacy, and inadequate funding. The author recommended that the government should provide adequate funding and infrastructure, as well as training and capacity building programs for civil servants.

Similarly, Mosud & Govender, (2020) conducted a study on the challenges of e-government implementation in Nigeria and identified factors such as inadequate funding, lack of political will, and inadequate infrastructure as significant obstacles. The authors suggested that the government should address these challenges by providing adequate funding and infrastructure, as well as engaging in stakeholder consultations to ensure the buy-in of all relevant actors.

Several studies have also explored the potential benefits of e-government implementation in Africa. For example, Adam (2020) conducted a study on the impact of e-government on public service delivery in Africa and found that e-government initiatives had the potential to improve service delivery, increase efficiency, and reduce corruption.

Similarly, Okunola and Rowley, (2013) investigated the impact of e-government on citizens' satisfaction with public service delivery in Nigeria and found that e-government initiatives had a positive impact on citizens' satisfaction.

Conclusively, e-government is an expanding concept of governance and service delivery with the potential to transform the nature of public administration in developing countries such as Nigeria. Successful e-government implementation requires careful planning and a well-defined strategic model that involves all relevant stakeholders. The literature has identified several factors that contribute to the success or failure of e-government initiatives, including government support, infrastructure, stakeholder involvement, and user trust. Despite the challenges of e-government implementation in Nigeria, several studies have highlighted the potential benefits of e-government, including improved service delivery, increased efficiency, and reduced corruption.

III. RESEARCH METHODOLOGY

This report presents a qualitative study that aims to develop an e-government planning and strategic model for Nigeria's growing economy. The study follows a descriptive research design, which seeks to describe and analyze the current situation of e-government in Nigeria, as well as identify the key factors and best practices for successful e-government implementation.

Data for this study was collected through a comprehensive review of relevant literature, including academic articles, reports, and government documents. The literature review covered various topics related to egovernment, including its definition, benefits, challenges, and best practices. The review also examined e-government implementation in other countries and identified the key success factors and lessons learned.

Data analysis for this study encompassed identifying patterns and themes in the data and organizing them into meaningful categories. The analysis focused on identifying the key factors and best practices for successful egovernment implementation in Nigeria, as well as developing a strategic model that can guide future egovernment initiatives in the country.

The study's limitations include the reliance on secondary data sources for the literature review. However, the study's findings are still valuable in providing insights into the current state of e-government in Nigeria and identifying the key success factors for future implementation.

IV. RESULTS

The results of this study provide valuable insights into the current state of e-government planning and strategic models in Nigeria's growing economy. The study found that despite the significant potential of e-government to enhance government efficiency, accountability, and citizen participation, Nigeria faces numerous challenges in implementing effective e-government programs.

Data analyzed from the review revealed that one of the major barriers to e-government implementation in Nigeria is the lack of infrastructure and technological capacity (Olatokun & Adebayo, 2012). It was found that there is limited access to reliable electricity and internet connectivity, which makes it difficult to maintain and update e-government systems (Basu, 2004). Additionally, there is a shortage of skilled IT professionals and a lack of funding for e-government projects (Meiyanti et al., 2018).

Furthermore, the study found that there is a low level of citizen awareness and participation in e-government services in Nigeria. Many citizens still prefer to interact with government officials in person rather than through online platforms (Asogwa, 2013). This is partly due to the perception that e-government services are unreliable and insecure, as well as a lack of trust in government institutions.

Despite these challenges, the study identified some successful e-government initiatives in Nigeria. For example, it was identified that the National Identity Management Commission (NIMC) has implemented a biometric identification system that has improved the accuracy and efficiency of identity verification processes (Okunola and Rowley, 2013). Additionally, the Lagos State government has developed an online platform that allows citizens to pay taxes and apply for permits and licenses, which has reduced the time and cost of these processes. The researcher was also able to get data which portrayed the core elements of E-government strategy in Nigeria. These elements include:

➤ The Analysis of Existing E-Governance Infrastructure:

It is essential to analyze the existing e-governance infrastructure in Nigeria at any point in time when an E-government strategy is being developed (Abdulkareem & Ishola, 2016). This includes an assessment of the current technology infrastructure, the availability of internet connectivity, the level of digital literacy among citizens, and the existing e-government applications. This analysis will provide insight into the strengths and weaknesses of the current infrastructure and help identify areas that require improvement.

➤ Identification of Key Stakeholders:

Identifying key stakeholders, including government agencies, private sector companies, civil society organizations, and citizens, is crucial for successful egovernance implementation (Ashaye & Irani, 2019). Involving all these stakeholders is essential in the development of a comprehensive e-governance plan that takes into account their needs and expectations.

➤ Development Of Institutional And Legal Frameworks:

Developing institutional and legal frameworks is vital to clarify the roles and responsibilities of different stakeholders, establish clear lines of communication, and ensure effective collaboration among different government agencies (Agbele et al., 2012). A robust legal and regulatory

framework is also necessary to protect citizens' privacy and data security and promote the adoption of e-governance in the public sector.

➤ Investment in Human and Financial Resources:

Investing in human and financial resources is crucial for the success of e-governance initiatives. Skilled human resources, including IT specialists, project managers, and trainers, are necessary for the successful implementation of e-governance (Dhamodharam & Saminathan, 2011). The government should provide adequate training and capacity building to its employees to ensure successful implementation.

Conclusively the researcher was able to propose a strategic model for implementing E-government initiatives.

The model proposed a framework that includes the following steps:

• Step 1: Analysis of Existing E-governance Infrastructure
Analyse the existing e-governance infrastructure in
Nigeria, including technology infrastructure, internet
connectivity, digital literacy levels, and existing egovernment applications.

• Step 2: Identification of Key Stakeholders

Identify key stakeholders such as government agencies, private sector companies, civil society organizations, and citizens.

- Step 3: Strategic Planning Goal Setting
- ✓ Develop a clear vision and specific, measurable, achievable, relevant, and time-bound (SMART) goals for electronic governance in Nigeria.
- ✓ Develop a roadmap that outlines the steps required to achieve the vision and goals, including key milestones, deliverables, timelines, and necessary resources.
- ✓ Develop a communication plan that outlines how the electronic governance plan will be communicated to stakeholders, including regular updates, feedback mechanisms, and opportunities for engagement and consultation.
- ✓ Establish a governance structure that will oversee the implementation of the electronic governance plan, including clear roles and responsibilities, decision-making processes, and accountability mechanisms.
- Step 4: Implementation and Evaluation
- ✓ Implement the electronic governance plan according to the roadmap and communication plan, including the deployment of new IT systems, the development of new policies and procedures, and the provision of training and support for staff and stakeholders.
- Monitor and evaluate the implementation of the electronic governance plan to ensure that it is achieving the desired outcomes, collect and analyze data, solicit feedback from stakeholders, and make adjustments as needed.

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- ✓ Ensure sustainability of the e-government projects through the development of a legal and regulatory framework that protects citizen's privacy, data security, and promotes adoption of e-governance in the public sector.
- ✓ Promote citizen participation by creating awareness about e-governance and its benefits, providing citizens with access to e-government services, and encouraging feedback from citizens.
- ✓ Invest in capacity building programs that train government officials and citizens on the use of egovernment applications.
- ✓ Prioritize funding for e-governance initiatives and explore public-private partnerships to leverage resources.

V. DISCUSSION

The results of the study show that Nigeria is facing challenges in implementing e-governance initiatives. The lack of infrastructure, digital literacy, and government commitment are major hindrances to the adoption of e-governance in Nigeria. The study also found that limited access to the internet, poor electricity supply, and inadequate funding are some of the key challenges facing the implementation of e-governance initiatives in the country.

The proposed model, which includes the analysis of the existing e-governance infrastructure, identification of key stakeholders, strategic planning goal setting, implementation and evaluation, offers a framework that can help Nigeria overcome the challenges facing e-governance implementation. The model suggests that a clear vision and specific, measurable, achievable, relevant, and time-bound goals for electronic governance in Nigeria should be developed. It also proposes the development of a roadmap that outlines the steps required to achieve the vision and goals, including key milestones, deliverables, timelines, and necessary resources.

Furthermore, the model suggests implementation of the electronic governance plan should be monitored and evaluated to ensure that it is achieving the desired outcomes. This can be done by collecting and analyzing data, soliciting feedback from stakeholders, and making adjustments as needed. The model also recommends the development of a legal and regulatory framework that protects citizen's privacy, data security, and promotes adoption of e-governance in the public sector. Additionally, citizen participation can be promoted by creating awareness about e-governance and its benefits, providing citizens with access to e-government services, and encouraging feedback from citizens.

Capacity building programs can also be developed to train government officials and citizens on the use of egovernment applications. This will help to ensure that the necessary skills and knowledge are available for the successful implementation of e-governance initiatives. Finally, prioritizing funding for e-governance initiatives and exploring public-private partnerships to leverage resources

can help to ensure the sustainability of e-government projects.

In conclusion, the proposed model provides a framework that can help Nigeria overcome the challenges facing e-governance implementation. By following the steps outlined in the model, Nigeria can develop and implement successful e-governance initiatives that can improve the delivery of public services, increase transparency, and promote citizen engagement in government decision-making.

VI. CONCLUSION

Overall, the study highlights the challenges and opportunities for implementing e-government initiatives in Nigeria. It identifies the lack of infrastructure and technological capacity, low citizen awareness and participation, and inadequate funding as some of the major challenges facing the implementation of e-government in Nigeria. However, the study also identifies some successful e-government initiatives such as the biometric identification system implemented by the National Identity Management Commission and the online platform developed by the Lagos State government for payment of taxes and application for permits and licenses.

The study proposes a strategic model for implementing e-government initiatives that includes steps such as analyzing existing e-governance infrastructure, identifying key stakeholders, strategic planning goal setting, implementation and evaluation. The model provides a framework that can be used by policymakers and other stakeholders in Nigeria to develop and implement comprehensive e-government plans that take into account the needs and expectations of citizens, private sector companies, civil society organizations, and government agencies.

In conclusion, the study provides insights that can help policymakers and stakeholders in Nigeria to overcome the challenges facing the implementation of e-government initiatives and leverage the opportunities presented by e-government to enhance government efficiency, accountability, and citizen participation. By following the proposed strategic model, Nigeria can develop and implement effective e-government programs that promote transparency, citizen engagement, and economic growth.

REFERENCES

- [1]. Abdulkareem, A. K., & Ishola, A. A. (2016). E-government in Nigeria: Progress and prospects.
- [2]. Adam, I. O. (2020). Examining E-Government development effects on corruption in Africa: The mediating effects of ICT development and institutional quality. *Technology in Society*, 61, 101245.
- [3]. Agangiba, W. A. (2013) 'E-governance justified', International Journal of Advanced

- [4]. Agbele, K. K., Azeez, N. A., Abidoye, A. P., Adesina, A. O., Venter, I. M., & Oyewole, A. S. (2012). Threats to E-government implementation in the civil service: Nigeria as a case study.
- [5]. Amagoh, F. (2016). Determinants of e-government diffusion in Nigeria: An examination of theoretical models. *Information Development*, 32(4), 1137-1154.
- [6]. and directions for future directions', Government Information Quarterly, 31(4), pp. 631–636.
- [7]. Ashaye, O. R., & Irani, Z. (2019). The role of stakeholders in the effective use of e-government resources in public services. *International Journal of Information Management*, 49, 253-270.
- [8]. Asogwa, B. E. (2013). Electronic government as a paradigm shift for efficient public services: Opportunities and challenges for Nigerian government. *Library Hi Tech*, *31*(1), 141-159.
- [9]. Basu, S. (2004). E-government and developing countries: an overview. *International Review of Law, Computers & Technology*, 18(1), 109-132.
- [10]. Computer Science and Applications, 4(2), pp. 223–225.
- [11]. Cordella, A., & Tempini, N. (2015). E-government and organizational change: Reappraising the role of ICT and bureaucracy in public service delivery. *Government information quarterly*, 32(3), 279-286.
- [12]. Dhamodharam, R., & Saminathan, A. (2011). Challenges of e-government in African countries: Creating an enabling environment in Nigeria. In *2011 IST-Africa Conference Proceedings* (pp. 1-8). IEEE.
- [13]. Estevez, E. and Janowski, T. (2013) 'Electronic Governance for Sustainable Development Conceptual framework and state of research', Government Information Quarterly. Elsevier Inc., 30, pp. S94–S109.
- [14]. Eurostat, (2020). Impact of COVID-19 on the use of ICT in enterprises Statistics Explained https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Impact_of_COVID19 on_the_use_of ICT_in_enterprises&oldid =561817. |Accessed 14/04/2023|
- [15]. Field, T. (Ed.). (2003). *OECD e-government studies the e-government imperative*. OECD Publishing.
- [16]. Meiyanti, R., Utomo, B., Sensuse, D. I., & Wahyuni, R. (2018, August). e-Government challenges in developing Countries: A literature review. In 2018 6th International Conference on Cyber and IT Service Management (CITSM) (pp. 1-6). IEEE.
- [17]. Mensah, I. K. (2019). Factors influencing the intention of university students to adopt and use egovernment services: An empirical evidence in China. Sage Open, 9(2), 2158244019855823.
- [18]. Mosud, O., & Govender, I. (2020). Critical issues affecting e-government implementation in Nigeria: A case of housing development agency. *African Journal of Gender, Society & Development*, 9(4), 33.

- [19]. Okunola, O. M., & Rowley, J. (2013). Dimensions of the user experience of e-government services: the Nigeria immigration service website. In *13th European Conference on eGovernment (ECEG 2013)* (pp. 380-388). Academic Conferences and Publishing International. Reading.
- [20]. Olatokun, W. M., & Adebayo, B. M. (2012). Assessing e-government implementation in Ekiti state, Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*, 3(4).
- [21]. West, D. M. (2004). E-government and the transformation of service delivery and citizen attitudes. *Public administration review*, 64(1), 15-27.
- [22]. Yunis, M. M., & Sun, J. (2009, November). Determinants of e-government readiness: An application of canonical correlation and SEM analysis techniques. In *Southwest Region Decision Sciences Institute Conference* (pp. 569-578).
- [23]. Zhang, H., Xu, X. and Xiao, J. (2014) 'Diffusion of e-government: A literature review