

Assessing E-government Systems in Developing Countries: An Analysis of Various Government Agencies Websites

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ABSTRACT

Government or public-sector administrations are now moving into digital form. Most of the government services and programmes can now be accessed through their respective ministries or agencies websites. This paper has examined the level of electronic government (e-government) adoption in developing countries. It chooses Nigeria and India for the assessment with selected agencies web portals. The paper is a survey research that is descriptive in nature, it makes use of secondary source of data. The results of the assessment were presented in a tabular form with six (6) agencies web portals. Three (3) of the portals are from Nigerian government agencies while the remaining three (6) are from Indian government agencies. The agencies are NIMC, FRSC, and NIS from Nigeria; then UIDAI, FRRO, and National Portal of India from India. The paper recommends that government at developing countries should increase the level of sensitization and awareness to citizens of the need to be making use of e-facilities, it also recommends that non-governmental organizations should equally adopt the use of e-facilities in carrying out transactions within and outside their organizations, and finally mobile operators should subsidize the data rate subscriptions to citizens.

Keywords: E-government, Developing Countries, Government, Agencies, Websites

I. INTRODUCTION

E-Government is the application of technology to enhance accessibility as well as delivery of government services to the benefit of citizen, business partners, and employee ^[1]. This has to do with the use of information technology in handling the activities of public sector range from data flow, process mapping and political issues. The E-government is achieved through the presence of computer and web services with the aid of internet. Developed nation have incorporated the used of web-based technologies in handling administrative activities by means of digital delivery of service to citizens and employee as well as in provision of good governance.

The terms e-government, e-government and digital government are usually used to represent the use of ICTs in public sector organizations ^[2]. E-government relies on ICTs to automate the processes to serve citizens, business, and government employees by means of world wide web (www) and internet.

Application of ICTs to public sector has enhance public administration productivity as well as satisfying citizen demands for online information and service provisions or delivery ^[1].

E-government is usually targeted to three main group known as government, citizen, and business or interest groups. This is represented as Government to Citizen(G2C), Government to Business (G2B) and Government to Government (G2G) ^[3].

E-government provide G2C services to citizen in terms of given the online access to information and service such as making inquiries about government agencies and receiving feedback through their websites, payment of taxes, renewal of driving licenses, enrolment of national identity card, payment of school fees, etc. G2B consists of two-way interactions and transactions known as government-to-business and business-to-government. This deals with selling of products and services to government as well as government selling products and services to suppliers or business stakeholders. G2G deals with activities or processes that take place between different government organizations and agencies in order to improve efficiency and effectiveness of government operations^[3].

E-government if properly implemented has a lot of impact to government and will help in improving good governance. Among the impacts include cost savings, reduce administrative burden, transparency and accountability^[4]. The platform will make both government and citizens to monitor the activities of government agencies in terms of accessing some of the services and activities undergoing in such ministries or agencies. There are certain barriers that will hinder proper implementation of E-government. This include ICT infrastructure, privacy, security, policy and regulation issues, lack of qualified and trained personnel, lack of partnership and collaboration, culture, leaders and management support^[4].

However, developing counties are left behind in terms of adopting new innovations and trends in governmental affairs. Though some of the countries have started using technologies in some of the government affairs and agencies.

Therefore, this research aimed at assessing the level e-government adoptions in developing countries. It will specifically analyze the websites of some government agencies. The study will cover Nigeria and India with some selected ministries and agencies. The research has the following objectives

- i. To determine the services and effectiveness on government portals offered for the citizens
- ii. To determine level of acceptability of the web portals by citizens

II. METHODOLOGY

The paper is a survey research that is descriptive in nature. It uses secondary sources of data that covers web portals of three government agencies of both Nigeria and India. The agencies from Nigeria includes National Identity Management Commission (NIMC), Federal Road Safety Corps (FRSC), and Nigeria Immigration Service (NIS). While agencies portals from India includes Unique Identification Authority of India (UIDAI), Foreign Regional Registration Office (FRRO), and National Portal of India. The agencies websites were analyzed in order to achieve the objectives of the research. The results were presented using tables describing the functionality of these web portals.

III. RESULTS

This section presents the outcome of analysis made on the selected agencies web portals. The portals assessed from Nigeria include NIMC with URL address as <https://www.nimc.gov.ng/>, FRSC with URL address as <http://frsc.gov.ng/>, and NIS with URL address as <https://immigration.gov.ng/>. The portals assessed from India

include UIDAI with URL address as <https://uidai.gov.in/>, FRRO with URL address as <https://indianfro.gov.in/frro/>, and National Portal of India with URL address as <https://www.india.gov.in/>. The outcome of the analysis is presented in the table below:

Table Showing the selected agencies, URL address and descriptions

AGENCY	URL ADDRESS	DESCRIPTION
NIMC	https://www.nimc.gov.ng/	NIMC carries out the registration of citizens of Nigeria into the National Identity Database. It provides citizens with a unique national identity number (NIN). Citizens usually visit NIMC website for information about national identity card such as enrolment centres, pre-enrolment portal, and enrolment form. They use the portal to find-out the available enrolment centres as well as downloading the enrolment form for onward submission to the enrolment centre, or they can start the enrolment process directly from the Pre-enrolment portal link and then complete the remaining process at the respective enrolment centres. The online pre-enrolment will ease and reduce the entire enrolment process. Citizens also visits the websites for NIN checkup.
FRSC	http://frsc.gov.ng/	Federal Road Safety Corps is a government agency that is responsible for making the highways safe as well as controlling and regulating the traffic among the motorists in Nigeria. They are also responsible for issuance and renewal of drivers' license. Drivers usually visit the FRSC website to check the registered and accredited driving schools by the FRSC, check the list of approved number plates centres as well as checking the penalties and offences regarding traffic and other regulations concerning FRSC. However, the enrolment of driving license is usually done at the FRSC offices, it is not accessible by drivers themselves on the portal.
NIS	https://immigration.gov.ng/	The Nigeria Immigration Service is responsible according to the act establishing it for control of persons entering or leaving Nigeria, issuance of travel documents, to bona fide Nigerians in and outside Nigeria, issuance of residence permits to foreigners in Nigeria,

		<p>border surveillance and patrol, enforcement of laws and regulations with which the agency is been directly charged.</p> <p>The NIS website provides services to both citizens and foreigners such as information regarding passport, visa, and residential permit. The citizens can apply and make payment for their passport online and thereafter take the printout to the NIS office for photograph and biometric capture. They can equally track the status of their applications. Foreigners can as well pay for visa application online as well as check the status of their visa. Therefore, NIS website is mostly used by citizens intending to travel abroad as well as foreigners who are residing within Nigeria and those that intends to visit Nigeria.</p>
UIDAI	https://uidai.gov.in/	<p>Unique Identification Authority of India is responsible for issuance of national identity card known as Aadhaar Card to Indian citizens. The portal accepts Aadhaar enrolment as well as Aadhaar generation. It gives room for data update. There is provision for enrolment agencies which are hired and approved by the registrars of the authorities. They help in registration and enrolment of residents for Aadhaar registration.</p>
FRRO	https://indianfro.gov.in/fro/	<p>The FRRO is responsible for registration of foreigners on their arrival in India. They issue residential permit to foreigners as well as process and forward their documents to Home department for visa extension. The FRRO equally issued stay visa to foreigners whenever their visas are extended. Usually, foreigners visit and fill the extension or required form on the FRRO website along side attaching all the necessary supporting documents. Thereafter, the printout together with the copies of the uploaded document will be submitted to the FRRO office.</p>
National Portal of India	https://www.india.gov.in/	<p>This is the Official Portal of the Government of India, designed, developed and hosted by the National Informatics Centre (NIC) with the aim of providing a</p>

		single window access to the information and services being provided by the Indian Government for citizens and other stakeholders. An attempt has been made through this Portal to provide comprehensive, accurate, reliable and one stop source of information about India and its various facets. The current Portal is a metadata driven site that links to the other Indian Government Portals/websites for most updated information.
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IV. CONCLUSION AND RECOMMENDATIONS

E-government provide flexible means in accessing government services as well as reaching out to government by the citizens. Developing countries are now adopting the technological innovations in their public administrative sectors. The availability of computers and internet have made this possible. The paper examined Nigeria and India as case studies with selected government agencies.

The agencies picked from both countries were interrelated in terms of service delivery. NIMC and UIDAI render similar services to the citizens of both countries, while FRRO and NIS as render similar services to foreigners. The research makes the following recommendations:

- i. Government should increase level of sensitization and awareness among citizens on the use of e-facilities
- ii. Non-governmental organizations (NGOs) should equally adopt the use of e-facilities in carrying out transactions within and outside their organizations.
- iii. Mobile network operators should subsidize the rate of data subscriptions to citizens, this is especially in the case of Nigerian context.

REFERENCES

- [1] B.W. Wirtz and P. Daiser. E-Government Strategy Process Instruments, 1st edition ISBN 978-3-00-050445-7, September 2015. Retrieved from http://www.uni-speyer.de/files/de/Lehrst%C3%BChle/Wirtz/WirtzDaiser_2015_E-Government.pdf on 10th January, 2018.
- [2] J.P. Gant. Electronic Government for Developing Countries. International Telecommunication Union 2008 Draft. Retrieved from https://www.itu.int/ITU-D/cyb/app/docs/e-gov_for_dev_countries-report.pdf on 21st December, 2017.
- [3] S.C.J. Palvia and S.S. Sharma. E-Government and E-Governance: Definitions/Domain Framework and Status around the World. Foundations of E-government, Computer Society of India. Retrieved from http://www.iceg.net/2007/books/1/1_369.pdf on 10th December, 2017.
- [4] R. Davies. eGovernment: Using technology to improve public services and democratic participation. European Parliamentary Research Service, 2015. Retrieved from

[http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565890/EPRS_IDA\(2015\)565890_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565890/EPRS_IDA(2015)565890_EN.pdf)
on 10th January, 2018.

- [5] M. Alshehri and S. Drew. E-GOVERNMENT FUNDAMENTALS. IADIA International Conference ICT, Society and Human Beings 2010. Retrieved from https://research-repository.griffith.edu.au/bitstream/handle/10072/37709/67525_1.pdf on 21st December, 2017.