

E-Government, China Internet Plus, and the One Belt One Road Initiative: The Africa Connection

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Abstract—The lack of Information and Communication Technologies (ICT) infrastructure in African countries is hampering the successful adoption, development and implementation of e-government in Africa. Electronic government is the use of ICTs to modernize government public administration processes and to provide government services to citizens with a purpose to enhance efficiency, accountability, and transparency in government's interaction with the citizenry. ICT application in public administration has the potential to modernize and create smarter government and improvement in public service delivery. China's Internet Plus policy and One Belt One Road strategy present a golden opportunity for countries in Africa to attract the huge financial investment through Chinese IT companies to develop and close Africa's ICT infrastructure gap. This study recommends the establishment of One Belt One Road ICT Infrastructure Fund for Africa (OBOR ICT Fund for Africa) to enable countries in Africa to source solely for the purpose of ICT infrastructure development in the public sector/government machinery which would in turn promote the adoption and development of e-government in the public sectors of respective countries in Africa.

Keywords—E-government, public service delivery, internet plus, one belt one road initiative, China, Africa.

I. INTRODUCTION

THE application of ICT by Government in public administration through its state agencies to enhance the delivery of public service and provision of information through the Internet to citizens and business is referred to as e-government. Electronic government is also defined by [1], [2] as the use of ICT to improve government transparency and accountability in the public administration of state agencies with the purpose to improve public service delivery, access to information and public governance. E-government is adopted by government agencies to become modernized and service oriented to provide efficient means accessing government public services [3]. The ultimate beneficiary of e-government adoption and implementation are a country's citizens [4]. The introduction of ICT in public administration has the potential to reduce the level of bureaucracy in government state agencies and organizations, and it can work better to deliver public services by creating a new system or layers of inter-organizational levels of the bureaucratic system of

coordination among state agencies [5]. The government in any part of the world is challenged with many social issues, such as corruption and poor delivery of public services, which has led the citizens of those nations to lose the confidence and trust in government public administration systems but this trust could be regained with the application of e-government [6]. Through the adoption of appropriate technologies, governments could fight or reduce the menace of corruption in the public sector and provide a more efficient, smarter and high-quality service delivery that meets the expectation of citizens.

Countries all over the globe, including Africa, are encouraging the public sector use of ICT through e-government to reduce levels of bureaucracy, change and modernize the traditional business of government, and most importantly provide enhanced interaction between the state and citizens. The revolution occurring in public sectors across the world is as a result of citizen's demand for a better and transparent public service delivery from state institutions, which is putting pressures on government to find a more innovative means of satisfying or meeting citizen's demands. The adoption and development of e-government by African countries would among others: Standardize and streamline the public administration processes of the government agencies, ministries and departments, provide government public services to citizens covering wider and diverse sectors of a country, provide timely information online, automate inefficient processes and ensure active interaction with citizens electronically, transform governance and public administration institutions to enhance efficiency, transparency and accountability in government machinery, and reduce the menace of corruption in public sector management in African countries

Africa, as a developing continent, is faced with so many challenges both social and economic of which ICT infrastructure is one of the major challenges. "The key challenge for the e-government adoption and development of Africa remains the widespread lack of infrastructure and functional literacy" [7]. ICT infrastructure in most parts of the continent is poor due to the lack of huge financial investment required to adopt appropriate technologies to propel social and economic growth. The United Nations E-government Survey 2014 posits that limitations in ICT infrastructure and human capacity pose the greatest challenge in e-government adoption and development around the globe, particularly in Africa [8]. The progress of e-government development on the continent of Africa remains comparatively slow and uneven, and to reverse this phenomenon, the United Nations E-government

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Survey 2014 recommends countries in the region to focus on building human capital, ICT literacy and importantly on bridging the ICT infrastructure gaps which would provide an enabling environment for e-government development on the continent [8]. The China "Internet Plus" strategy and the One Belt One Road (OBOR) initiative present a good opportunity for a win-win corporation between China and African countries to harness China's massive ICT infrastructure investment to improve ICT infrastructure on the continent. Internet Plus seeks economic growth through the integration of Internet technologies and all aspects of day-to-day life such as manufacturing, finance, insurance, construction, medical system, government, agriculture etc., to develop new industries; promote business development and improve the lifestyles of people. The Internet Plus concept was revealed by Premier Li Keqiang in March 2015. The action plan is to integrate mobile Internet, cloud computing, big data and the Internet of Things with modern manufacturing, to encourage the healthy development of e-commerce, industrial networks, and Internet banking and also to help Internet companies increase their international presence [9]. Further, the action plan maps development targets and supportive measures key sectors such as mass entrepreneurship, innovation, manufacturing, agriculture, energy, public service, and e-commerce, etc. Internet Plus would become the new economic model and an important driving force for economic and social innovation and development. The purpose of the plan is to promote innovation-driven development and upgrade China from being a "big industrial country" to a "powerful industry country". The three policy goals are to accelerate the fiber optic network construction, improve broadband speed and promote information consumption.

The One Belt and Road initiative refers to the Silk Road Economic Belt, a development strategy launched by the Chinese government with the ultimate intention of promoting economic cooperation among countries along the proposed Belt and Road routes. The Belt and Road aim to connect Asia, Europe and Africa along five routes. Policy coordination, facilities connectivity, unimpeded trade, financial integration and people to people bonds are the five major goals of the Belt and Road initiative. But for the purpose of this research, the second goal of "facility connection" will be the focus. The connectivity of infrastructure facilities includes transport, Telecommunication (ICT), and oil and gas pipelines and ports, to be promoted to form part of a move to establish an infrastructure network connecting various Asian sub-regions with other parts of Asia, Europe, and Africa.

The aim and objective of this paper are first to argue that e-government presents a unique opportunity for a government to provide a smarter, faster and a more efficient public service delivery to citizens anywhere in the world, with particular attention on Africa. Secondly, to make the point that the China Internet Plus and One Belt One Road (OBOR) Initiative or strategy could fuel and propel African countries to secure the huge ICT investment required to adopt and implement the right ICTs through e-government, not only to ensure a smarter, faster and a more efficient public service delivery, but a more

transparent and accountable government through good governance.

This research paper was prepared with secondary sources data and therefore, the qualitative method of research was adopted and used for this study.

II. CHINA INTERNET PLUS AND ONE BELT ONE ROAD INITIATIVE

A. China Internet Plus Policy

The Internet Plus policy strategy was announced officially by Premier Li Keqiang during the National People's Congress (NPC) in March 2015, which is held annually by Chinese leaders to make major policy announcements with regard to the country's economic and social policies. The Internet Plus strategy seeks to integrate mobile Internet, cloud computing, big data and the Internet of Things with a focus on modernized manufacturing that will encourage the development of e-commerce, industrial networks, Internet banking and assistant Chinese companies in increasing their international presence in the world. It envisaged that project will be a major boost to restructuring the economy, improving people's livelihoods and transform the public administration of government. The strategy maps, development targets and supportive measures for key sectors that the government anticipates could establish new industrial models by the integration with the Internet, which could provide mass entrepreneurship and innovation, manufacturing, agriculture, energy, finance, public services, logistics, e-commerce, traffic, biology and artificial intelligence [10].

B. One Belt One Road (OBOR)

The One Belt One Road initiative was officially proposed by President Xi Jinping in 2013. The initiative has two strategies, the first, the Silk Road Economic Belt which is supposed to connect China and Europe overland and the second, 21st Century Maritime Silk Road which intends to link Asia, Africa, and Europe via Sea routes [11]. These two concepts combine form the One Belt One Road Initiative with a major goal to improve connectivity throughout Asia, Europe, and Africa backed by a policy of financing and building transparent infrastructure in and across Eurasia, the South China Sea, the Indian Ocean and the Mediterranean [11]. It further seeks to focus on promoting policy coordination, facilitating connectivity, unimpeded trade, financial integration and people to people bonds [11]. The "Belt" is designed to network rail routes, overland roads, oil and natural gas pipelines and other key infrastructure projects while the "Road" is a maritime network of port and other coastal infrastructure from South and Southeast Asia to East Africa and the northern Mediterranean Sea [12]. Fig. 1 illustrates the comprehensive One Belt One Road initiative.

It is estimated that the coverage areas of the OBOR initiatives stretch to 55 percent of the world GNP, 70 percent of global population and 75 percent of known energy reserves in the world [14]. The OBOR covers important six economic corridors outside China [15], these are: New Eurasian Land

Bridge, China-Mongolia-Russia Corridor, China-Central Asia-
West Asia Corridor, China-Indochina Peninsula Corridor, China-Pakistan Corridor, and the Bangladesh-China-India-
Myanmar Corridor.

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Fig. 1 China One Belt One Road (OBOR) Initiative [13]

The five major areas of the OBOR are Policy Coordination, Facilities Connectivity, Investment and Trade cooperation, Financial Integration and People to People:

- *Policy Coordination*: Policy coordination is critical and fundamental in the implementation of the OBOR initiative. It will comprise inter-governmental cooperation, macro-policy exchanges and communication mechanism to further mutual political trust among participating countries.
- *Facilities Connectivity*: The priority area for OBOR is to improve the connectivity of the infrastructure in countries along the Belt and Road areas. It is expected to link up unconnected road sections, port infrastructure construction, and cooperation in order to deliver international transport facilitation. Also, the connectivity of energy infrastructure and the construction of cross-border optical cables and communication trunk line networks would be a priority for OBOR.
- *Investment and Trade*: This area is to ensure improvement in investment and trade facilitation, enhancing customs cooperation, expanding trade areas and developing modern service trade and cross-border e-commerce. The objective is to eliminate investment barriers, expand mutual investment areas and strengthen cooperation in emerging industries and to encourage Chinese enterprises/companies to participate in infrastructure construction by making industrial investments in countries along the Belt and Road Corridors.
- *Financial Integration*: The success of the OBOR initiative would be based on sound and effective financial integration of all countries along the Belt and Road. Systems would be put in place to build a currency stability system and the establishment of the Asian Infrastructure Investment Bank and BRICS New Development Bank.
- *People to People*: This is to ensure friendly cooperation among countries along the One Belt One Road corridors to promote cultural and academic exchanges between China and participating countries. It will be in the form of sending students to each other's countries for exchange programmes. The cooperation in science and technology is expected to increase and think tanks in the Belt and Road countries will be supported to jointly undertake research with special forums.

III. THE AFRICA CONNECTION

So what is the Africa Connection? The African connection is the One Belt One Road Initiative route which links the whole of Africa through Kenya. With the combination of these two strategic development initiatives spearheaded by China, African countries could negotiate favorable investment terms to entice China (through its big IT Firms) to invest and expand the ICT infrastructure in Africa. The Internet+ and the One Belt One Road combined can deliver a SMART Economic Corridor along the African route. Not only will the SMART Corridor influence the expansion of e-commerce, but will also lead to the modernization of government public administration

and change traditional operations through e-government which will culminate in enhanced, improved and efficient service delivery to the ordinary citizen. So the African Connection here is that, through the Internet Plus and the OBOR, African countries can benefit from ICT infrastructure investment from China, to change manual operations of government, increase Internet penetration both mobile and broadband, and most importantly, bring government closer to the people through the e-government system. This African Connection (ICT infrastructure) is very important if e-government in Africa is to develop to a state where government services and information are easily available to citizens without the hassle of long queues, etc. The main point here is that the combination of Internet Plus and the One Belt One Road initiative would create SMART Corridors in two areas; e-commerce and e-government, but the focus should be how the two strategies could be of immense benefit to governments of African countries to deliver efficient public service to all citizens.

IV. CONCLUSION AND RECOMMENDATION

Africa should take advantage of these (Internet Plus and One Belt One Road) two policy strategies from China to attract the needed financial investment to improve ICT infrastructure development in African countries. Improved ICT infrastructure will not only create the environment for e-government development to thrive but also has a direct impact on the ability of public and state institutions to deliver enhanced and quality public service, which will ultimately be in the interest of the citizenry of Africa. In order to achieve this goal, it is recommended that China should set up a One Belt One Road ICT infrastructure fund for Africa (OBOR ICT Infrastructure fund for Africa) with the sole purpose to enhance and improve ICT infrastructure in African countries, particularly within the public sector and government state institutions in each of these countries, which will further promote the adoption and development of e-government on the continent.

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