DOI: 10.20472/BMC.2017.006.005

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THE ECONOMIC IMPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON PRIVATE AND PUBLIC SECTORS

Abstract:

Economic activities on both the public and the private sectors are contributing substantially in countries Gross Domestic Products (GDP). However, past studies revealed that, many business activities in the private and public sectors in Africa previously struggled to compete with the world best as a result of the lack of use of Information and Communication Technology (ICT). Countries in Africa lacked access to ICT that could have assisted decision makers to maximise profit and deliver the required services to organisations and citizens in order to remain very competitive in the market. As a result of the above, many African governments have introduced ICT policies in their strategic plans to support businesses both in the private and public sectors. This article is set to explore the role that ICT plays in shaping businesses in Africa through sound policies. These policies are strongly supported by the New Partnership for Africa's Development (NEPAD) and the African Union (AU). This paper argues that, governments and established businesses in Africa should invest extensively on ICT if they aspire to deliver well deserved services to tax payers and to remain competitive in the markets through profit maximisation in the sustainable manner.

Keywords:

Information and Communication Technology (ICT); Africa, profit maximisation, markets structures, NEPAD

JEL Classification: A10, H80

Acknowledgment: This piece of paper is the remixed work of Emmanuel Innocents EDOUN previous conference presentations partly supported by constructive concepts of cited authors.

1 Introduction

ICT acronym stands both for Information, Communication and Technology and for Information and communication Technologies. Whatever the sequence of words, ICT is about process flow of information or data from technology equipment such as hard drive or processor to the end users through communication technology like fibre optic or cables (Michalsons, 2016). Nowadays, with the ongoing influence of globalisation, private and public organisations need to accommodate their business activities to the new ICT as a business opportunity to perform their productivity and to improve their competitive edge in the new marketplace.

This paper investigates the role that ICT plays in supporting private and public companies in Africa. Edoun (2015) argued that ICTs are important in the management of public affairs through the policy of decentralisation .He argued that the managerial approaches require the extensive use of the latest technologies in order to manage efficiently for effective service delivery. Past and recent studies also revealed that, the failure of most African governments to communicate effectively was partly due to the lack of efficient technology and this situation was exacerbated by the centralisation of powers that has not really been effective for Africa's development (Edoun, 2015).The fact that many African countries lacked access to ICTs brought African policy makers and politicians to start thinking of ICT policies in order to follow globalisation trends and it pace. Governments in Africa including the New Partnership for Africa's Development (NEPAD) are aware of the challenges that African countries are facing in relation to socio-economic development. NEDAD is the African Union programme that is set to bridge the gaps that are impeding the achievement of socio-economic development of African countries. With the above in mind African governments are now fully aware that Africa cannot be put in the path for socio economic development unless they extensively invest in science, technology and innovation all related to ICT. NEPAD (2009) argued that the main goal of Africa's Science and Technology Consolidated Plan of Action (CPA) are to strengthen Africa's capacities to develop harness and apply science and technology and innovation to achieve socio-economic development.

As a result, NEPAD introduced an electronic learning system (e-learning) in line with its objectives which is to achieve socio economic development. This policy was adopted to develop and implement ICT projects such as the NEPAD e-Schools Initiative. This actually supports the Integration of technology in teaching and learning in African institutions, with the primary objective of empowering students to become computer literate end-users with sound knowledge of the most recent technological platforms (Highton, 2009). With appropriate ICT regulatory frameworks, African countries could improve their corporate governance in pursuit of better results in all areas of business capacities. Through ICTs equipment, multinationals can easily operate and manage plants in other countries and remain very competitive in the markets.

2 Literature Review

A number of scholars have voiced their support and concerns on issues related to the impact of ICT on the private and public sectors. This situation therefore requires that, governments in Africa should heavily invest on science and technology in order to be part of the global village. The extensive use of the NEPAD e-school project should support the e-learning process in African countries because of the advantages that Africa derives from this project. For instance, Pascal (2013) argued that e-learning is seen as a platform of Information and Communications Technology (ICT) usage that supports and enhances teaching and learning in education. He further argued that, failures is the result of not having effective e-learning system in place which temporarily overshadowed the hope of gaining a wider and flexible access to tertiary education, and also shown by innovation with cheap costs.
It was further argued by (Chadwick, 2013) that e-learning may be expressed as a form of teaching and learning that supports communication between a lecturer and learner with tailor-made programmes conveyed via the computers or mobile devices with the support of quizzes, games, as well as video to enhance learning opportunity. Other possible explanation to this was provided by Lipshitz and Parsons (2013) who argued that e-learning is a general term to computer enhanced learning that is used interchangeably in many ways. In many circumstances, advanced learning technologies making use of multimedia and networked technologies are associated with e-learning. E-learning is therefore viewed as an interactive way of learning through Information Communications Technology and computer networks (Ortiz, 2013).

An e-learning institution is encouraged to have well guided policies defining its ethics and values; visible in its legal outlines that regulates the exchange and distribution of e-learning content through ethical concerns of plagiarism, licensing of content and electronic voyeurism (Anitha and Harsha 2013:193-199; Dzakiria et al., 2012; Pascal, 2013:1). The choice of an e-learning system should compress the learning programmes with learning tools that are useful in achieving learning outcomes in a space of time that may be said to be limited (Nilsson, Ostegren, Fors, Rickenlund, Jorfeldt, Caidahl, and Bollinder , 2012:1-9). E-learning may be based on different ways to enhance learning, though little is known as to how optimally it is being utilised (Nilsson et al., 2012 ; Lucas, 2013).

Another important aspect in the effectiveness of e-learning is that the quality of e-learning programmes may be influenced by factors such as interaction levels defined by interactions student to student, student to instructor, and student to learning program (Dzakiria, Don, and Abdul Rahman, 2012).

Magboo and Schwab (2013:2) states that e-learning strategy development is an essential technology "*for blended and online learning*". Blended learning that is not backed by the right infrastructure support at the end side of it can be a complete mess.

Issues of bandwidth, services hosting, and lecturer / facilitator access to the online e-learning system are critical in making the blended / online learning a success.

Institutions adopting e-learning educational program, should avoid not having a solid strategy in place. When there is no vision, the institution will not know where it is going as any road will take it there (Rosenberg, 2012). Most common mistakes that organisations may be faced with in choosing an e-learning strategy are equating technology with strategy, confusing strategy with tactics, looking at development and delivery rather than the bigger business picture, focusing on creating a traditional offer online, going it alone failure to reach consensus, misreading executive support, thinking this is part-time or short term work, ignoring risks, weaknesses and threats and failure to manage change (Rosenberg, 2012:1-3; Cabezas, 2013).
E-learning is different from learning methods that do not use on-line or digital platforms hence the need to bring in methods of self-discipline; and motivation to the learners. In the selection of an e-learning strategy, different abilities and qualities of students should be taken into consideration (Freed, 2013). This will allow the facilitator to provide training based on the levels of different learners.

Dobra Alexandra (2012) in quoting Thompson (2008) strongly confirmed that, ICT as a tool for Institutional democratisation increases citizen participation in web based discussions. Dobra (2012) further argued that, there is significant opportunity for further strategic thought related to the ability of the ICT sector to foster higher standards of democratic accountability and openness. This is clear that, the absence of credible ICT tools could be one of the reasons for the failure of decentralisation policy to effectively play its developmental role. The inclusion of ICT in public enterprises for instance could certainly contribute to the efficiency of these state entities if there is bottom up communication supported by the intensive use of ICT network.

ICT being considered as an effective tool for the dissemination of decentralisation policy information, this article want to investigate if it application on decentralisation could stimulate economic development. The implication of ICT in the policy of decentralisation could be considered as an important tool for economic development if the process is adequately implemented by local authorities.

Effange (2015) provided a convincing framework in his analysis related to the challenges in implementing Ethernet wireless LAN in the United Nations Peace Keeping Operations. However, he argued that, it is important to notice that the services provided by wireless local area networks commonly known as Wi-Fi, have a significant impact in most corporate network environments and also in private establishments. This could strongly assist existing businesses and those in making. Theories elaborating on competitive advantages certainly buy in the role that ICT plays in the business environment

In his Analysis Effange (2015) further inferred that the authorisation of Wifi network is country specific. There is always political or governmental influence which could dictate the approval of Wifi network in any country. Whenever the ongoing diplomatic relations between the host country and the organisation are strain, this can affect the assistance required from the Government of the country for certain operations. He argued that, this situation usually occurs in UN (United Nations) operating missions which could deeply affect the objective set up by the mission in a specific area of operations.

From the above therefore, one could retain that, ICT policy is very important in Africa. Obviously, all depends on the policies to adopt so that ICT could become more effective in doing business in Africa. For instance, the South Africa government through the recommendations from it white paper (1996) created the department of Science and technology (DST) to foster its development agenda and jobs creation. A comparative analysis of ICT policies in Africa was also crafted by NEPAD (2009). In this NEPAD document, it was argued that, all ICT policies of Botswana, Nigeria, Rwanda, Ethiopia, Mozambique, South Africa and Kenya were assessed and faced similar challenges when it comes to achieving their respective national policies goals. In this regard, the document highlighted that the main challenges faced by Kenya are related to the harnessing of the potential of ICTs for economic growth and poverty reduction. The lack of comprehensive policy and regulatory framework was equally highlighted as well as inadequate infrastructure. These issues are similar to all African countries. Investing in more up to date ICTs is very important if Africa want to meet its long term goal in pursuit of the 2063 African Union agenda. This paper is divided into four major sections. It starts by introducing ICT policies by including it rationale. The second section discusses the review of literature while the third and the fourth sections provided a brief discussion, lessons learned as well as conclusion and recommendations

3 Discussions and lessons learned

Catherine (2003) convincingly argued that with the speed with which information communication technology (ICT) is developing and the breadth of its socio-economic impact, it is imperative that Africa should not be excluded from the technological revolution. She inferred that the use of ICT has been integrated into virtually every aspect of commerce, education, governance and civic activity in developed countries and has become a critical factor in creating wealth worldwide. Yet in Africa, ICT has barely taken a foothold. Computer illiteracy and the lack of ICT infrastructure are widely recognized as an increasingly powerful obstacle to the economic, civic and political development of Africa.

With globalisation leading major strategies for economic transformation in developing countries, Africa has no choice but to equip itself with the technological Knowhow in order to remain competitive in the global markets. Communication for business

purposes requires the use of the latest IT equipment to constantly monitor supplies and demands of products. The identification of the competitors in pure competitive markets is also essential for growth. ICTs therefore remain the unavoidable platform that could support the vision and the mission of many profit maximising companies in the 21st century. Edoun (2015) stated that no business could remain competitive and sustainable if it does not comply with the latest models of ICT. His findings have also shown that employers should continuously send their staff on courses that equip them with the required knowledge in the areas of needs. Leaders should get use of ICT equipment in order to keep their developmental mission alive and up to date. This will allow management to appreciate accountability and transparency as business centres encourage citizen participation in managerial decision making. The use of internet allows management to communicate effectively and achieve bottom line results within the team through IT specific software. Small Business owners are equally encouraged to get use of accounting software to run their financial statements that will help decision makers to manage business growth and prevent financial issues that sometimes lead companies to close down.

4 Recommendations and Conclusions

As the world is more and more operating in the global village, it has become imperative that private and public companies should operate at global level by bringing global initiatives such as ICT business process upgrading at local or country levels. This is certainly possible only through ICTs policies. Political policies should not interfere with countries ICTs policies as this could hinder company's objectives and compromise the overall country economic growth.

Many African countries should be focusing on improving the governance of their national telecommunications systems so that they remain aligned to new technologies using updated infrastructures networks. With the improvement in ICT features and systems, African countries should align their medium to long terms economic goals to modern ICTs programmes and policies. If African countries align their vision to ICTs, they could certainly compete in the global economy.

African countries should therefore invest extensively on ICTs in order to fulfil the allocated development agenda and to achieve the African Union agenda 2063.

ICT programmes should be aligned to the country' short and long term economic vision.

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