

Information and Communication Technology (ICT) as a Social Development Strategy for Africa

*Emmanuel Innocents Edoun*¹

Abstract

Many African public enterprises failed to play a developmental role in the past because of poor technology settings and lack of capacity. The introduction of Information and Communication Technology (ICT) in strengthening democratic governance institutions now looks critical for Africa's development. This article therefore critically examines the role that ICT plays in facilitating the strengthening of decentralisation process in Africa. Seen as the total transfer of powers from upper to lower levels of government, decentralisation is important in that, ICT role in disseminating information within the decentralisation settings plays an effective role for the effective implementation of projects at local levels. It is the view of this article that, if the basic principles of decentralisation are accepted, ICT could contribute to socio economic development by empowering local citizens and businesses through secured transactions using mobile service phone for example and other user friendly ICT methods.

Keywords: Information and Communication Technology (ICT); democratic governance; decentralisation; socio economic development;

Introduction

The failure of most African governments failing to communicate effectively was partly due for the lack of efficient technology and this situation was exacerbated by the centralization of powers that has not really been effective for Africa's development. Even though Edoun (2015) mentioned in his previous publication that, a number of governments in Africa in the past ignored the basic principles of democracy and accountability that could have ignited socio-economic development, the lack of ICT tools and capacity in the area of development was equally the motive behind this failure. On the other note, in her analysis of the democratic Impact of ICT in Africa, Dobra Alexandra (2012) in quoting Thompson (2008) strongly argued 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 about the ability of the ICT sector to foster higher standards of democratic accountability and openness. Which is clear that, the absence of credible ICT tools could be one of the reason 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.

¹ PhD., Tshwane University of Technology, South Africa

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.

1. Justification for the Implication of ICT on Decentralisation Policy in This Study

The ICT as previously mentioned, plays a critical role in development. Local Governments that are decentralisation agents use local authorities to implement development projects and the use of ICT in public services is one of such projects. These local authorities are tasked to put in place ICT user friendly equipments in order to facilitate and support daily business. However, the failure of public enterprises to play its developmental mandate effectively in a decentralized settings is partly due because of the lack of clarity over the relative authority of provincial and local governments. This has evidently prevented national governments from devolving important powers to local governments because these don't also exist at provincial level. In quoting Smith (1985) and in line with the above, Edoun (2015) argued that, the ability to borrow directly on capital markets, or the imposition of a local surcharge on personal income tax should be a vivid example that uses ICT tools for monitoring the transactions and the related loopholes that may occur.

In a decentralised settings, local authorities use web pages, internets and other related ICT technics and gadgets to communicate with upper level of governments where they receive instructions when the delegation of powers is applied. The delegation of powers approach in decentralised settings only allows for the transfers of some powers to local authorities while the authoritative decision remains at the centre. But this communication could be viewed as a total transfer of powers when there is a genuine application of devolution. In considering any type of both forms of decentralisation, local authorities are involved and local governments are bound to use ICT settings for democratic and local governance which is why it is important to build the capacity of local authorities and their managerial teams for them to become conversant with the use of ICT's equipment.

It is therefore evident that when a decentralised structure is put in place, ICT could assist, private and public enterprises businesses to either maximise their profits by for instance reducing the transaction costs or to effectively implement projects that will have a positive impact on the beneficiaries at local levels. By playing a developmental role, ICT could intervene further by empowering local communities through education. Training centres could be created to build the capacities of local authorities who were elected but who have no formal education to run local government portfolio.

The acquisition of laptops helps local authorities to communicate effectively with their peers and stay connected via internets. It is certainly in this way that, ICT could claim to play a developmental role in a decentralised settings. ICT are known to act as business catalyst across the globe. The use of ICT equipment made life easy for accountants who now used specific software to generate bank statements in order to take effective decisions to improve the quality of services rendered by the bank. It is clear that, the use of internet banking made

things easier because, customers need not to queue any longer as they can make transactions from wherever they are. The fact that ICT is being improved and adapted to serve all areas of business capacities, this has facilitated development as well as poverty reduction in developing countries. The use of ICT is certainly crucial in a globalised world. It is also important to note that, ICT has a huge impact on small businesses. (Reddy 1999) argues that Municipal Local Economic Development (LED) in South Africa does not rely exclusively on competition for investments. A number of workers that were retrenched for instance decided to join the informal sector with the establishment of small and micro enterprises which automatically requires the support of ICT led strategies. Support for the informal sector may be a more promising pro-poor approach at local level and this could generate the most needed employment for the poor. In doing so, ICT is expected to play a leading role in insuring the success of these Small Medium and Micro Enterprises (Smmes).

On the other hand Erie (1992) argued that, the provision of good-quality infrastructure and amenities to all residents is probably the key contribution a municipality can make to pro-poor economic development. Community-based and progressive approaches that link profitability to reduce poverty might also be explored (Gyan-Baffour, 2003). He argues that, community-based public works programmes create infrastructure whilst providing income, job experience and training. Redistributive procurement policies ensure that when local authorities buy goods and services they help to create a more equitable local economy. In rural areas, access to land – as well as skills and credit for small farmers is a prerequisite for pro-poor LED. Here again, it is important to notice the importance of ICT and its effect in empowering local resident and the entire provincial community.

2. Review of the Relevant Literature

The current literature tries to explain the connectedness of the importance that ICT may have on the impact of decentralisation on LED. In fact the rationale is to ascertain ICT settings as the very reason that contributes in holding the whole decentralised system together in order to ignite socio economic development at all levels of government based on a country's model of development.

In Quoting Reddy (1996), the arguments is that, the vision for local economic development in South Africa should be home-grown: an African alternative based on the cultural and political heritage of the country, the survival strategies of the poor over many decades, and the tradition of community organisation and mobilisation. He postulates, that the Batho Pele principle, which is essentially a Citizen's Charter based on the traditional Sesotho adage meaning "people first", ensures that people are sufficiently informed about governance processes. The dissemination of this information of course requires the extensive support of ICT equipment so that, the majority of citizens are informed of this form of governance. Through the ICT technics, the majority of citizens will become aware of the functions of various ministries and departments, those in charge, and what to expect from them through the Batho Pele principle which promotes openness and transparency (Reddy, 1996).

While the Batho Pele principle promotes openness and transparency to support local economic development, the study argues that, the use of ICT should be taken into consideration to promote local economic development through an effective dissemination of

information. Modisiane (2000) argued that, this may be done by means of a policy which encourages business to establish themselves in the areas of jurisdiction of the local authorities. The policy should therefore be ICT oriented in order to reduce transaction costs and enhance effectiveness. ICT also has the potential in assisting in the planning and budgeting system for efficiency. As Modisiane (2000) put it, during the planning process, certain projects or supplies that will be required during the budget period could be identified as potential work for Smme's. .

As mentioned earlier, ICT enhance the visibility of public enterprises by rendering more effective their managerial approach through the extensive use of specific software that intervene in managerial decision making. Prior to including ICT to assist in public decisions, Christopher Polllit (2007) who using the new public management (NPM) approach found that, decentralised management advanced poverty alleviation goals in Europe. The same results were confirmed by Reddy (1996) for South Africa. Edoun (2011) quoted Habibi et al (2001) who studied the impact of devolution on social sector outcomes in Argentina for the period 1970-94 and concluded that fiscal decentralisation had a positive impact on delivery of education and health services as well as reducing intra-regional disparities. ICT could once again assist in facilitating the communication for the much needed changed in the management of public affairs.

Also, Edoun (2011) inferred that, Huther and Shah (1997) using cross-section and time series data for a large number of countries find that decentralisation contributed to improve delivery of public goods provision. Akai and Sakata (2007) using state level data for the USA concluded that fiscal decentralisation contributed positively to the US growth. All these was possible through the use of econometric software that assisted in the analysis of the relevant data for decision making purpose. The above studies that were elaborated with the aid of ICT view decentralisation as an important element for economic development which is why this study considers decentralisation as an important element for socio economic development. In explaining the impact of decentralisation on LED, Edoun(2011, 2012, 2015) developed a wide range of review of literature that convincingly explained the impact of decentralisation on LED. If the use of ICT could support Edoun's concepts on the implication of decentralisation on LED, Africa will certainly expect more countries in Africa to grow economically .In his previous research, Edoun (2012) strongly argued by quoting Chazan et al (1999) that LED occurs when communities, government and business sector usually acting in partnership start to engage in activities to improve local economic conditions. But this study argues that, LED initiatives adopted by local governments not only affect the conditions of local residents, but it also affects the economic welfare. As a consequence therefore, LED needs more ICT led strategy to reinforce communication within that partnership. In a decentralised settings, key stakeholders in LED initiatives would be community organisations, local authorities, business and labour organisations. In order to understand LED , Edoun (2011, 2012, 2015) argued that, various formal theories have been put forward in the analysis of LED in developing countries. Among them are the Myrdal causation theory, the Growth pole theory, and the agglomeration theory, all these theories, Edoun (2011,2012 , 2015) argues, support development initiatives at local levels. Which is why the use of ICT in support of these theories is very important to stimulate LED with the support of business community centres that use wireless in managing local businesses. 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. Which 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. As mentioned by Edoun (2011) according to cumulative causation theory (Myrdal's, 1957), some markets and places or nodes attract capital and skilled labour force accumulating competitive advantages compared to other locations. The theory further stressed that less developed localities can have advantages from growth in developing areas due to spread effect that derived from diffusion of innovations in lagging areas and rise in export markets for products from these lagging areas. This requires a strong ICT networking such as wireless local area networks in order to monitor the level of development that has taken place in these innovative settings. 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.

Affange (2015) postulated that, the growth in commercial wireless networks occurred primarily in the late 1980s and 1990s, and continues into the 2000s (Patil et al,2003).Following agreements for radio frequencies to be opened for commercial wireless network, the American telecoms regulatory body the FCC, opened several bands of wireless spectrum from the industrial, scientific and medical bands to be used for communication networks. These networks were to operate without the need of government license. The frequencies used were 900MHz, 2.4 GHz and 5.8GHz which were already used by other devices, now they had to be used for communication purposes on condition that any device using these frequencies will have to steer around the interference from other equipment. Effange (2015) further argued that, the vendors of wireless devices at the time such as Proxim and Symbol developed only proprietary equipment to operate within the unlicensed bands.

Effange (2015) then argued that, this made it very impossible for equipments from different vendors to communicate with each other. This was not encouraging to buyers because they were compelled to only use the products of a particular vendor. With the success of the Ethernet wired networking standard of IEEE 802.3 which started since 1985 with 10Base-2, upgrading to 10Base-T in 1990, 100Base by 1995, Full duplex in 1997 and 1000Base-X in 1998. vendors realized that it will be beneficial to come up with a standard where by all products can adhere to, giving room for products from different vendors to easily talk to each other, thus encouraging buyers to invest in wireless technology. This is actually in line with Prince2 principle of learning from experience, which encourages project teams when starting a project, they should review previous or similar projects to find out if lessons learned could be applied by learning from the successes of others (Murray et al,2013). This led to the development of the various flavours of IEEE 802 standards used by the different types of wireless networks. In his Analysis Effange (2015) further argued that the authorisation of Wifi network is country specific. There are 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. This situation

usually occurs in UN operating missions and this could affect the businesses the mission's objective in the area of operations.

3. Lessons Learned

ICT remains the cornerstone for many businesses in the 21st century. Experiences have shown that, no business could remain competitive if it does not comply with the latest models of ICT. Findings have also shown that, employers should send their staff on courses that equip them with the required knowledge in the areas of need. Local authorities should get use of ICT equipments in order to achieve their developmental mission alive. 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 with IT specific software. Small Business administration at local level equally require the extensive use of ICT.

Recommendations and Conclusions

As mentioned at the beginning of this study, a number of public entities failed to play a developmental role in the past because of poor technology settings and lack of capacity. With all businesses relying strongly on ICT, it has become imperative that, local authorities get use of ICT equipment in order to allow local governments to work efficiently at local levels. Local governments in many countries are decentralisation agents that are expected to work closely with the population. This local governance calls for citizen participation. In allowing citizens to participate in local decision making processes, it means that local governments empower local citizens to become more creative and productive. In a sense many are encouraged to create businesses that will require the use of ICT. It is therefore imperative that, local authorities create training centres where, local business owners could be trained to acquire the necessary ICT skills that will allow them to run their businesses efficiently.

With the above in mind, one could definitely confirm that, the application of ICT at local level in strengthening democratic governance is important for Africa's development. Seen as the total transfer of powers from upper to lower levels of government, decentralisation is important in that, ICT role in disseminating information within the decentralisation settings plays an important role for the effective implementation of projects at local levels. It is the view of this article that, if the basic principles of decentralisation are accepted, ICT could contribute to socio economic development by empowering local citizens and businesses through secured transactions using mobile service phone for example and other user friendly ICT methods.

References

- Akai N. and M. Sakata (2007). Fiscal Decentralisation-Evidence from State levels Cross Section Data of the United States. *Journal of Urban Economics*, 52(1).
- Baffour, G. G. (2003). "Decentralisation as a Means to Improve Governance and Poverty Reduction: Experience from Ghana", *United Nations Public Administrations Network*.

Chazan N., Mortimer, Ravenhill, J. and Rothchild, D. (1999). *Politics and Society in Contemporary Africa*. London Macmillan.

Dobra A. (2012). The Democratic Impact of ICT in Africa, in *Africa Spectrum*, 47(1), 73-88.

Edoun, E. I. (2012). Decentralisation and Local Economic Development, Effective Tools for Africa's Renewal, *The Institute for African Renaissance Studies*, 7(1).

Edoun, E. I. (2011). Decentralisation as a Condition for Local Economic Development Policy and Strategy in Cameroon, PhD Thesis, The University of the Witwatersrand, Johannesburg, South Africa.

Effange, S. M. (2015). Barriers to Implementing Ethernet Wireless Lan in United Nations Peace Keeping Operations, Masters Thesis, Liverpool University, UK.

Erie, S. P. (1992). How the Urban West was Won: The Local State and Economic Growth in Los Angeles, 1880-1932, *Urban Affairs Quarterly*, 27(4), pp.519-554.

Habibi et al. (2001). "Decentralisation in Argentina," Economic Growth Center, Yale University, Discussion.

Huther, J., S. Roberts and A. Shah (1997). Public Expenditure under Adjustment Lending Lessons from the World Bank.

Modisiane N. B. (2000). "The Evolving Local Economic Development Process in Mafikeng: A Contested Terrain between Political and Profit Interests". *South African Geographical Journal*, 82(1), pp.13-20.

Murray A. et. al. (2013). *Managing Successful Projects with Prince2*, AXELOS Ltd, United Kingdom

Pollit C. (2007). *New Public Management in Europe: Adaptation and Alternatives*. Basingstoke, Palgrave/Macmillan.

Pollit C. and B. Geert (2009). *Continuity and Change in Public Policy*.

Smith, B. C. (1985). *Decentralisation: The Territorial Dimension of the State*. London: Allen and Unwin

Acknowledgment: This piece of paper is the remixed work of Emmanuel Innocents Edoun previous conference presentations partly supported by constructive concepts of Samuel Effange research work in the ICT sector.