

Kenya Vision 2030: The feasibility of transforming Kenya into a regional ICT hub

Christine, Joan Onsomu¹, Onyando, Betty Akoth², Rita, Ndinda Munyae³,
Lynne, Karago Wambui⁴, Angeline, Ambogo Kidiga⁵

Abstract: This article introduces a new dimension in the debate on vision 2030, the feasibility of transforming Kenya into a regional ICT hub. The paper looks at various ways in which Kenya has tried so far to achieve the visions goals and also mentions some of these ICT achievements and limitations so far. Additionally, the paper will employ various chapters that will explain the whole programme. The article is divided into various chapters and in each chapter, the ICT vision 2030 stages is analyzed.

Keywords: Kenya Vision 2030 and ICT Hub.

1. INTRODUCTION

Kenya has emerged as the ICT hub in the last decade by being a pace-setter in the innovative technology. One of the inventions that have put Kenya in the world map is the use of M-Pesa mobile transfer by mobile operator Safaricom. The chief promoter to these economic growth and expansion of ICTs in Kenya is due to the fact that Kenya has embraced liberalization of the market (Kimutai, 2012).

In 1999, Kenya post and Telecommunication Corporation was split into

1. Post Corporation of Kenya
2. Telkom Kenya limited
3. Communications commission of Kenya (CCK).

The above entities steered to the restructuring of the public ICT policy and the prominence changed from scale economies that were achieved through the regime monopolies to competition and the use of private public association to increase the reach of existing ICTs. Vision 2030 states that the economic influence of ICTs will be determined by the Business process outsourcing sector (BPO) (Kimutai, 2012).

Currently there are a number of initiatives and ongoing projects taking place. Some of these projects include; Digital Inclusion Projects (Pasha Centers/Digital Villages, Wezeshu Initiative), Information Security. Some of the initiatives are: Konza Technology Park, zero-rated taxes on imported ICT hardware, ICT software, eGovernment, Skills Program, Digital learning programs, (DLP), National optic fiber broadband Infrastructure (NOFBI), Business Process Outsourcing, Local Content Program (Tandaa Digital Content Grants, Open Data Portal).

It is also worth noting the Kenya education network (KENET), is the national research and education network that is responsible for various services such as the provision of affordable and cost effective and low congestion of internet bandwidth services among others. Some of the clientele of KENET are member universities across the country (Kenet, 2016).

A. PROBLEM STATEMENT:

The research paper tries to analyze the role of technology in achieving the vision 2030 and also tries to answer whether the plans and the time that has been outlined in achieving this objective is realistic and what are the challenges that is facing Kenya in achieving the objectives of ICT Vision 2030.

B. METHODOLOGY:

The research paper will employ the use of documentary data in collecting the information of ICT Vision 2030. In the documentary data, the researchers will collect information through the use of books, articles, and E-resources that will get through the USIU-A library.

C. THEORETICAL FRAMEWORK:

The visionary Vision 2030 Kenyan Information Communication and Technology sector, advances in information technology are bound to propel Kenya forward in different stages of national development. With the increasing availability and use of technology there is bound to be new opportunities especially for the youth to harness so that they can develop.

The functionalist theory focuses on the nature of mental states with it placing focus on what something does as compared to what it is comprised of (Labaree, 2016). Therefore in regard to functionalism, many people see the ICT sector in terms of what it has achieved and what it is yet to achieve with a major focus being placed on the technologies and other functional components which have facilitated for the possibility of the sector's success.

Modernization theory is an explanation theory for enlightenment of the process undergone by a nation as it transitions to a modern society from a traditional one (Labaree, 2016). With regard to the Vision 2030 project that is being implemented in Kenya, there is an effort being placed to implement and emphasize the growth and use of information technology in various sectors within the Kenyan nation. The goal of this is to achieve economic prosperity as well as overall national growth, development and integration so that people can be able to use the emerging systems which are being put in place in service offering. Such systems are such as the e-citizen portal which has replaced the traditional system where people would form long queues to make applications and renewals of passports, driving licenses and other documents where they can now do it online through a portal where all their data is captured and stored.

Another theory that comes to play is that of securitization. Securitization theory according to international relations refers to states making transformations of subjects to them being matters of security (Labaree, 2016). Issues which are securitized are not necessarily essential for state survival however there has been sufficient levels of success achieved in transformation of an issue to an existential problem. In Kenya, such issues which have been securitized are such as cyber terrorism and attacks which top security discussions despite them not being a common occurrence as compared to accidents.

II. EMPIRICAL

In this segment we are going to mention the major successes of the ICT journey in Kenya since the inception of the Kenya Vision 2030 plan.

Technology has and still continues to play a fundamental role in the development and advancement of African economies at large. According to World Bank- Kenya Economic Update (2010), ICT contributed 14% to Kenya's GDP growth between 2000 and 2009. This is an encouraging figure and it proves that if more concentration and effort is put into the ICT sector, then it can take Kenya to greater heights economically. Globalization in developing countries has been hastened thanks to technology and this has been possible through the strengthening and improving regional trends in business, investment, opportunities and modernization.

Kenya produced its first National ICT Policy in 2006. Its vision is a prosperous ICT driven Kenyan society, while its mission is to improve the livelihoods of Kenyans by ensuring the availability of accessible, efficient, reliable and affordable ICT services. This policy was guided by the need for infrastructure development, human resource development, stakeholder participation and appropriate policy and regulatory framework. It focuses on IT, broadcasting, telecommunications, postal services, radio frequency spectrum, universal access and institutional framework for implementation (The Kenya National ICT Masterplan, 2014).

In 2007 geo-mapping software called Ushahidi was developed with the intention of pinpointing violence during Kenya's disputed 2007-2008 presidential elections. Ushahidi has since evolved into a highly advanced open software provider. The organization has currently made possible the creation of more than 60,000 maps detailing environmental issues, elections and human rights abuses in 159 countries and over 31 languages. This is a very positive step for Kenya since an idea was

born locally and is now being used beyond Kenyan borders. Ushahidi also launched BRCK which is a strong portable internet connectivity device designed to keep people connected in rural and urban areas where electricity and internet connectivity are problematic. This service has been received well as far as the United States of America.

In 2010 iHub was launched and it has led to the formation of 152 companies hence jobs opportunities have increased. 2010 also saw the completion of the TEAMS (The East Africa Marine Systems) undersea fiber optic cable which notably increased broadband in East Africa. TEAMS was a project by Kenya's then Permanent Secretary in the Ministry of Information and Communications, Bitange Ndemo, who saw Kenya's vision as becoming a regional ICT hub.

Outsourcing has been identified in the Vision 2030 as a key pillar and driver of social and economic improvement through job and wealth creation. The government has developed a roadmap that will see Kenya take advantage of its unique geographical position and its well-developed ICT human resource base to become the preferred destination for outsourcing in Africa. The 2006 Kenya ICT Strategy and the Vision 2030 development print created the framework for Kenya to focus on global business process outsourcing as a way of generating jobs for young people and generating wealth for local entrepreneurs and investors (IST-Africa, 2015). According to Vision 2030, the economic impact of ICTs will be driven by the Business Process Outsourcing (BPO) sector. In 2008, the BPO sector generated almost KSh 700 billion (USD 7.3 billion).

Apart from just launching the very successful M-Pesa service (a mobile money transfer service) that is now being used internationally, Safaricom partnered with Equity Bank to create M-Kesho which is a mobile phone savings account. M-Kesho offers M-Pesa users the opportunity to open and operate a bank account, save, withdraw access loans and micro-financing and other services. This initiative responds well to Vision 2030 Kenya's economic plan which aims to push the country into a middle level income nation by 2030.

According to IST-Africa (2015), over 50% of Kenyans now have access to the internet, majority of whom access the internet through their mobile phone. As a result of this, the Government has embarked on developing services and products to reach these millions of Kenyans through this new media. McKinsey (2013) concluded that the internet sector contributed 2.9% of Kenya's GDP.

Kenya ICT Authority has been working with Carnegie Mellon University in relation to the Chipuka Software Development Certification. The program tests the ability of developers to write and execute code based on skills used in IT companies. The aim of this project is to train 500 developers per year.

According to IST-Africa (2015), another major achievement for Kenya in the ICT sector is the actualization of e-Government services in Kenya. It has led to a better and efficient delivery of information and services to the citizens, promote productivity among public servants, encourage participation of citizens in Government and empower all Kenyans. Some of the main online services available through the e-government initiative include: application of public service jobs online, tracking statuses of ID and passports, exam results and candidate selection, submission of tax returns, reporting of Corruption, business licensing e-registry.

In the past, Kenya has not taken advantage of the great potential that lies in its utilization of ICTs for social economic growth. However with the inclusion of ICT as a key driver towards Kenya attaining its vision 2030, deliberate measures have been put in place to turn the country into "an ICT hub and a globally competitive digital economy" (ICT Authority, 2014. Pg 12).

The first *medium term plan (MTP 2008-2012)* for the implementation of the vision 2030 placed the ICT theme as one of the foundations for transforming the country. This led to the robust growth of ICT companies like Techno Brain BPO, Kencall BPO, Safaricom and Airtel telecommunication companies. The job creation goal set for the BPO sector in this MTP period was 2,200, however the sector surpassed this target by creating 4,100 direct business process outsourcing (BPO), and a collective total of 7 000 direct and indirect BPO jobs (Waema, T, M and Ndung'u. M, 2012).

In the current second MTP (2013 - 2017), the Kenyan government has harnessed on ICT for efficient government with electronic systems employed in tax collection, education, and immigration sectors. The government of Kenya has also been recognized globally for transforming its public service through the innovative and ICT enabled HudumaCentres. Within this MTP period, the government expects an increase in e-commerce and every Kenyan connected to the new ICT infrastructure. The National ICT infrastructure is now connected to the international broadband highway undersea cables via the TEAMS, SEACOM, LION and EASS Y (ICT Authority, 2014. pg. 26).

This MTP period (2013-2017) has seen the realization of phase 1 construction plans of the vision 2030 ICT flagship program, Konza City with the Korean Government committing to finance the establishment of a national science and research institution (Tumo, R. 2016).

The MTP report (2008-2012), identified a fragmented institutional and legal ICT framework (Government of the Republic of Kenya, 2008). In response to this, key steps have been made to aligning the sector's legislative framework with the Kenyan constitution (2010); specifically articles 34 and 35 (Muswii, W. 2014). This has led to the enactment of the National ICT Master Plan, the National Cyber Security Master Plan, the National Broadband Strategy, and the National Cyber Security Framework (Muswii, W. 2014).

Kenya made the deliberate move to liberalize the mobile industry. As of 2014, the country's mobile penetration was at 80.5% (Communications Authority, 2014). The communications' regulatory demonstrates support for mobile ICT innovations such as M-Pesa, Mobikash Africa. As of September 2014, mobile money transfer subscriptions stood at 26.9 million. Innovations in the mobile sector have placed Kenya an ICT hub in Africa.

III. ANALYSIS

Since the layout of vision 2030 ICT as one of the economic pillar of vision 2030 has really been an impact to the Kenyan economy and the development as a whole. This has been seen through its contribution to the 14% contribution to the Kenya's GDP. According to IST Africa (2015) the growth of ICT can also be seen through the development of infrastructure human development and creation of employment.

From the above information it is evident that the ICT sector led to the formation of ICT policy whose aim was mainly to improve the infrastructure and human development as a whole. This has been seen through the growth of the BPO and outsourcing and as whole Kenya is the most attractive state in the region for outsourcing and BPO.

The development of the ICT sector has led to innovation in various sectors and this can be seen in the mobile money transfer, the M-Pesa, software developments and improvement in the government services. All the government institutions have websites to apply for a position in the government one needs to do it online. IST-Africa (2015) has explained that the ICT sector has been in upfront in Revenue generation. For example in the 2008 the sector generated about 7.3 billion dollars to the economy.

The development and completion of The East African Maritime Systems (TEAM) has seen Kenya to grow in terms of mobile subscribers and internet provision as a whole. According to IMF (2016) report, with the innovation of M-Pesa Kenya in general has seen an increase in mobile transactions with over 123,700 M-Pesa agents where the customers are able to carry out money transactions as compared to the 1440 bank branches and 2700 ATM branches country wide.

IV. CONCLUSION

Kenya stands out after South Africa in the region as an ICT hub and it is evident that that the ICT sector has been of great benefit to the Kenyan economy. The growth in human development sector, the innovation sector and the revenue sector has been tremendous. The ICT sector has largely contributed to the road toward the achievement of the vision 2030 and if this growth is steady then Kenya stands at a high position to achieve the Vision 2030 as a whole. The trend in which the Kenyan government is working and putting resources towards achieving the Vision 2030 is hopeful. The progress is gradual and we as a country are optimistic that within the remaining 14 years we will achieve all the objectives of the ICT segment of the Vision 2030.

REFERENCES

- [1] Communications Authority, (2014). Quarterly Sector Statistics Report- First Quarter of The Financial Year 2014/15 (Jul-Sep2014).
- [2] Cunningham, P., (2016). IST-Africa Initiative Coordinator <http://www.ist-africa.org/> (Accessed on 24/07/2016).
- [3] Government of the Republic of Kenya, (2008). First Medium Term Plan 2008 – 2012: Vision 2030- a Globally Competitive and Prosperous Kenya.

- [4] IST-Africa, (n.d). <http://www.istafrica.org/home/default.asp?page=doc-by-id&docid=5181> (Accessed on 28/06/2016).
- [5] Kenya ICT Authority (April, 2014). The Kenya National ICT Master Plan 2013-2017. Pg. 12, 26.
- [6] Kimutai, C., (2011). ICT at the hub of Kenya's vision 2030 <http://www.biztechafrika.com/article/ict-heart-kenyas-vision-2030/1594> (Accessed on 26/07/2016).
- [7] Labaree, R. V., (2013). International Relations. Retrieved from USC Libraries Research Guides: <http://libguides.usc.edu/c.php?g=234935&p=1559216>
- [8] Muswii, W., (2014). Taskforce report on ICT Sector Realignment. Published on School of Law (<http://law-school.uonbi.ac.ke>) (Accessed on 20/07/2016)
- [9] Tumo, R., (2016). Multibillion shillings deal signed for Konza City's Advanced Science College <http://www.kassfm.co.ke/new/index.php/item/843-multibillion-shillings-deal-signed-for-konza-city-s-advanced-science-college> (Accessed on 01/08/2016)
- [10] Waema, T, M. &Ndung'u.M., (2012). Understanding what is happening in ICT in Kenya - Evidence for ICT Policy Action Policy Paper 9.
- [11] World Bank, (n.d.). <http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD> (Accessed on 30/05/2016)